



RESEARCH CENTER

FIELD

Perception, Cognition and Interaction

Activity Report 2018

Section Dissemination

Edition: 2019-03-07

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CEDAR Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. General Chair, Scientific Chair

Ioana Manolescu has been a general chair of the IEEE International Conference on Data Engineering (ICDE) 2018.

9.1.2. Scientific Events Selection

9.1.2.1. Member of the Conference Program Committees

Ioana Manolescu has been a member of the program committees of: the International Workshop on Semantic Big Data (SBD), in conjunction with ACM SIGMOD 2018; the Data Engineering Meets Semantic Web Workshop (DESWeb) in conjunction with IEEE ICDE 2018; the WebDB workshop, in conjunction with ACM SIGMOD 2018; the 34th *Conférence sur la Gestion de Données – Principes, Technologies et Applications* (BDA) 2018.

9.1.3. Journal

9.1.3.1. Member of the Editorial Boards

Yanlei Diao has been the Editor-in-Chief of the ACM SIGMOD Record, SIGMOD's quarterly newsletter.

Ioana Manolescu has been an associate editor of the PVLDB (Proceedings of VLDB) Journal 2018.

9.1.4. Invited Talks

Ioana Manolescu has given invited keynotes at the Extended Semantic Web Conference (ESWC) 2018, and at the 34^{ème} *Conférence sur la Gestion de Données – Principes, Technologies et Applications* (BDA) 2018.

9.1.5. Leadership within the Scientific Community

Yanlei Diao and Ioana Manolescu are both members of the PVLDB Endowment Board of Trustees.

Ioana Manolescu has been the president the ACM SIGMOD "Jim Gray" PhD Award Committee.

Ioana Manolescu is a member of the steering committee (*Comité de Pilotage*) of "Bases de Données Avancées" (BDA), the informal association organizing the database research community in France and french-speaking countries.

9.1.6. Research Administration

Y. Diao is on the advisory board of the Data Science Initiative (DSI), a joint center between the applied mathematics and computer science departments of Ecole Polytechnique.

Ioana Manolescu has been a member of Inria's Commission d'Evaluation and of the Bureau des Comités de Projets of Inria Saclay.

Team members have participated to the following hiring committees:

- Associate professor – Ecole Polytechnique, Yanlei Diao. Jury member.
- Full professor – INSA Lyon, Ioana Manolescu. Jury member.
- Associate professor – Ecole Polytechnique, Ioana Manolescu. Jury member.
- Inria researcher – Inria Nancy, Ioana Manolescu. Jury member.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- Master: Y. Diao is a Professor at Ecole Polytechnique, where she teaches “System for Big Data” in M1; she also teaches “Systems for Big Data Analytics” in M2 in the Data Science Master Program of Université Paris Saclay.
- Master: I. Manolescu, Architectures for Massive Data Management, 12h, M2, Université Paris-Saclay.
- Master: I. Manolescu, Database Management Systems, 52h, M1, École Polytechnique.
- Licence: I. Manolescu, Giant Global Graph, 18h, L3, École Polytechnique.

9.2.2. Supervision

PhD in progress: Maxime Buron: “Raisonnement efficace sur des grands graphes hétérogènes”, since October 2017, François Goasdoué, Ioana Manolescu and Marie-Laure Mugnier (GraphIK Inria team in Montpellier)

PhD in progress: Tien Duc Cao: “Extraction et interconnexion de connaissances appliquée aux données journalistiques”, since October 2016, Ioana Manolescu and Xavier Tannier (LIMSI/CNRS and Université de Paris Sud)

PhD interrupted in July 2018: Sejla Čebirić: “CloudSelect: Data Mobility Within, Across and Outside Clouds”, since September 2015, François Goasdoué and Ioana Manolescu. The student joined the industry.

PhD in progress: Ludivine Duroyon: “Data management models, algorithms & tools for fact-checking”, since October 2017, François Goasdoué and Ioana Manolescu (Ludivine is in the Shaman team of U. Rennes 1 and IRISA, in Lannion)

PhD in progress: Enhui Huang: “Interactive Data Exploration at Scale”, since October 2016, Yanlei Diao and Anna Liu (U. Massachussets at Amherst, USA)

PhD in progress: Luciano di Palma, “New sampling algorithms and optimizations for interactive exploration in Big Data”, since October 2017, Yanlei Diao and Anna Liu (U. Massachussets at Amherst, USA)

PhD in progress: Felix Raimundo: “Nouveaux algorithmes et optimisations pour l’analyse profonde du génome à l’échelle de la population”, since October 2017, Yanlei Diao and Avinash Abhyankar (New York Genome Center, USA)

PhD interrupted in April 2018: Alexandre Sevin: “Exploration interactive de données sur de grandes sources de données hétérogènes”, since October 2017, Yanlei Diao and Peter Haas (U. Massachussets at Amherst, USA). The student joined the industry.

PhD in progress: Khaled Zaouk: “Performance Modeling and Multi-Objective Optimization for Data Analytics in the Cloud”, since October 2017, Yanlei Diao

9.2.3. Juries

Ioana Manolescu reported on the PhD thesis of Louis Jachiet (Inria Grenoble).

9.3. Popularization

9.3.1. Articles and contents

- In books/journals for the general public: Our research on computational fact-checking has been featured in Le Journal Toulousain in an article titled “La science se met au service de l’information”, in February 2018 (<http://www.lejournaltoulousain.fr/societe/la-science-se-met-au-service-de-linformation-pour-detecter-les-fake-news-54906>). Further, I. Manolescu has been interviewed as an expert for an article in Le Figaro, in March 2018 (<http://www.lefigaro.fr/secteur/high-tech/2018/03/08/32001-20180308ARTFIG00341-sur-twitter-les-fake-news-voyagent-plus-vite-que-les-vraies-informations.php>).

9.3.2. Interventions

- Ioana Manolescu participated to a televised debate on fake news and the media in “Le Grand Barouf Numérique”, a technology/society meet up organised by the city of Lille, in March 2018. The debate was broadcast by France 3 (<https://france3-regions.francetvinfo.fr/hauts-de-france/nord-0/lille/debat-fake-news-medias-sont-ils-malades-1446365.html>).
- Ioana Manolescu has participated to a debate on regulating the news media in “Les Journées de l’Economie”, a national event organized in Lyon, in November 2018 (<http://www.touteconomie.org/index.php?arc=bv1&manif=594>)

9.3.3. Creation of media or tools for science outreach

Our research on computational fact-checking has been featured in a documentary (<http://www.universcience.tv/video-tech-check-des-scientifiques-face-aux-fake-news-19501.html>) by UniverScience.TV, the organization responsible of preparing scientific short movies next to Cité des Sciences. The movie has been featured in an article in Le Monde (https://www.lemonde.fr/sciences/video/2018/01/24/comment-la-science-aide-a-reperer-les-fake-news_5246356_1650684.html).

GRAPHIK Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. General Chair, Scientific Chair

- Co-chair of the Doctoral Consortium for the KR conference, Tempe, Arizona, October 27th 2018. <http://reasoning.eas.asu.edu/kr2018/>.
- Co-chair of the Tutorial Track for the IJCAI conference, Stockholm, Sweden, 13th July 2018. <https://www.ijcai-18.org/>.
- Scientific co-chair of the international Workshop “Reasoning on Data” associated with the international conference The Web 2018, April 24, 2018. <https://sites.google.com/site/2018rod/>
- Co-organization of a one-day meeting of the group “Reasoning on Data”, common to GDR MaDICS and IA, October 4, 2018. <http://www.lirmm.fr/rod/rod3.html>

9.1.1.2. Member of the Conference Program Committees

We are regularly program committee members for the major conferences in AI (i.e., IJCAI, AAI, ECAI, AAMAS), and more focused conferences and workshops (such as RuleML+RR, Description Logics, COMMA etc.). We also take part in the animation of the national community (JIAF, EGC, IC, BDA). For 2018, we served in the following program committees:

International

- IJCAI / ECAI 2018 (International Conferences on Artificial Intelligence): Senior PC and PC
- AAI 2018 (AAI Conference on Artificial Intelligence): Senior PC
- AAMAS 2018 (International Conference on Autonomous Agents and Multiagent Systems): PC
- RuleML+RR 2018 (International Joint Conference on Rules and Reasoning): PC
- Description Logics 2018: PC
- KR 2018 (Knowledge Representation and Reasoning): PC

National

- IC 2018 (Ingénierie des Connaissances) : PC
- EGC 2018 (Conférence sur l’Extraction et Gestion de Connaissances): PC
- JIAF (Journées d’Intelligence Artificielle Fondamentale): PC

9.1.2. Invited Talks

- Invited tutorial, Reasoning on data: the ontology-mediated query answering problem, 6th World Congress and School on Universal Logic (in association with UNILOG 2018), Vichy, 16-20 June, 2018 (Marie-Laure Mugnier) <https://www.uni-log.org/start6s.html>
- Invited Seminar, Answering Conjunctive Regular Path Queries over Existential Rule Knowledge Bases, Quantitative Logics and Automata Seminar, TU Dresden, July 10, 2018 (Marie-Laure Mugnier)
- Invited Talk, L’interrogation de données en présence d’ontologies : Exploiter les connaissances pour mieux tirer parti des données, Journées Nationales du GDR Informatique Mathématiques (IM), April 2018 (Meghyn Bienvenu)

- Invited Talk, Accès aux données médiatisé par des ontologies, Journées plénières du GDR IA, October 2018 (Meghyn Bienvenu)
- Invited Talk, Ontology-Mediated Query Answering and Heterogeneous Data, Séminaire INRA du réseau IN-OVIVE, June 2018 (Federico Ulliana)
- Invited talk, Ontology-mediated query answering: Harnessing knowledge to get more from data, Annual Meeting of GT ALGA (GDR IM), October 2018 (Meghyn Bienvenu)
- Invited talk, Difficultés posées par les prédicats calculés en Ontology Mediated Query Answering, Meeting of GT RoD (GDR IA), October 2018 (Jean-François Baget)

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

The six faculty members teach at all university levels (IUT, Licence, Master). All of them do an average of 200 teaching hours per year. The main courses they are in charge of are: Logics (L), Databases (M, IUT), Web Technologies (IUT), Artificial Intelligence (M), Knowledge Representation and Reasoning (M), Social and Semantic Web (M), Software Engineering (IUT), Human Computer Interaction (IUT). Concerning full-time researchers in 2018, Jean-François Baget gave Master courses (40 h) and Meghyn Bienvenu gave a 3-hour tutorial at the international conference KR 2018 on “Inconsistency-Tolerant Ontology-Mediated Query Answering”.

Moreover, faculty members have some specific responsibilities in the Computer Science Licence and Master. Madalina Croitoru is the head of Special Conversion Year at IUT (since 2014) and the head of international relations for the computer science department at IUT (since 2018). Federico Ulliana is the head of the curriculum “Data, Knowledge and Natural Language Processing” (DECOL, about 30 students), part of the Master of Computer Science, since 2017.

9.2.2. Involvement in University Structures

Michel Leclere is deputy head of the computer science department of the faculty (since 2015). He is also in charge of the Information Systems of the faculty. Marie-Laure Mugnier is member of the Council of the Scientific Department MIPS (Mathematics Informatics Physics and Systems) of the University of Montpellier (since 2016).

9.2.3. Supervision

PhD defended: Abdelraouf Hecham, Defeasible Reasoning for Existential Rules, University of Montpellier, 9th of July 2018, P. Bisquert and M. Croitoru.

PhD in progress: Stathis Delivorias. Supervisors: Federico Ulliana, Michel Leclère and Marie-Laure Mugnier. “Boundedness and Module extraction in Existential Rules KBs”. Started Oct. 2015.

PhD in progress: Bruno Yun. Supervisors: Madalina Croitoru, Rallou Thomopolous, Srdjan Vesic (CRIL). “Decision Making and Ranking Semantics in Logical Argumentation Frameworks”. Started October 2016.

PhD in progress: Maxime Buron (CEDAR Inria team). “Efficient reasoning on large heterogeneous graphs”, Supervisors: François Gaosdoué (IRISA/CEDAR) Ioana Manolescu (CEDAR), Marie-Laure Mugnier. Started October 2017.

9.2.4. Juries

- Marie Laure Mugnier was a PhD reviewer for Duc Minh TRAN, University of Nice, July 2018.
- Marie Laure Mugnier was a PhD jury member for Jieying CHEN, University Paris Sud, November 2018.
- Meghyn Bienvenu was a PhD jury member for Christos Rantsoudis, University of Toulouse / IRIT, December 2018.

9.3. Popularization

9.3.1. Articles and contents

- M. Chein, Sur la science informatique et son installation à Montpellier, Conf. Association française pour l'avancement des sciences, Montpellier avril 2017 /Bull. Acad. Sc. Lett. Montp., vol. 48, suppl. C1 (2017), p.89-102/
- M. Chein, L'informatique : la science au coeur du numérique , Conf. Académie des Sc ; et Lett. De Montpellier, mai 2017, /Bull. Acad. Sc. Lett. Montp., vol.48 (2017), p.203-214/

9.3.2. Interventions

- M. Chein, Intelligence artificielle : Mythes et Réalités, Médiathèque, La Boissière, mars 2018
- M. Chein, La complexité en Informatique. Complexité spatio-temporelle des programmes, des algorithmes et des problèmes. Pierre Rouge Sciences, Assas, janvier 2018

LACODAM Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- General co-chair (E. Fromont) of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'19, <http://www.ecmlpkdd2019.org/>)
- Journal-track co-chair (E. Fromont) of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'18) (<http://www.ecmlpkdd2018.org/>)
- Organization co-chair (T. Guyet) of the technical track “Geoinformatic analytics” of the 34rd ACM/SIGAPP Symposium On Applied Computing (<https://gia.sciencesconf.org/>)
- Organization co-chair (T. Guyet) of the 3rd ECML/PKDD Workshop on Advanced Analytics and Learning on Temporal Data @ ECML (<https://project.inria.fr/aaldt18/>)
- Organization chair (T. Guyet) of GAST workshop at EGC 2018 (<https://gt-gast.irisa.fr/>)
- Organization chair and program committee member (L. Galárraga) of the AIMLAI workshop (<https://project.inria.fr/aimlai/>) that will take place at EGC 2019.
- Organization of the first workshop of the Data Mining axis of the #DigitAg project (A. Termier)

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

- Senior PC member of the Symposium on Intelligent Data Analysis 2018 (E. Fromont)
- European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases 2018 (E. Fromont, T. Guyet)
- AAAI Conference on Artificial Intelligence 2018 (T. Guyet)
- International Conference on Data Mining (ICDM) 2018 (A. Termier)
- International Joint Conference on Artificial Intelligence (IJCAI) 2018 (A. Termier)
- International Conference on Information Management and Big Data (SimBig) 2018 (T. Guyet)
- International Symposium on Computing and Networking (CANDAR) 2018 (A. Termier)
- Extraction et Gestion de Connaissances (EGC) 2018 (T. Guyet, A. Termier)
- Conférence Nationale en Intelligence Artificielle (CNIA) 2018 (T. Guyet, A. Termier)
- Conférence Française en Photogramétrie et Télédétection (CFPT) 2018 (T. Guyet)

10.1.2.2. Reviewer

- Conference on Information and Knowledge Management (CIKM) 2018 (L. Galárraga)
- Conference on Practice of Knowledge Discovery in Databases (PKDD) 2018 (L. Galárraga)
- Conference on Very Large Databases (VLDB) 2018, demo track (L. Galárraga)
- Extended Semantic Web Conference (ESWC) 2018, demo track (L. Galárraga)
- The Web Conference (WWW) 2018 (L. Galárraga)
- International Workshop on the Web and Databases (WebDB) 2018 (L. Galárraga)
- Symposium on Theoretical Aspects of Computer Science (STACS) 2019, (A. Termier)

- European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD) 2018 (A. Termier)

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- Machine Learning journal for the ECMLPKDD 2018 special issue (E. Fromont)
- Data Mining journal for the ECMLPKDD 2018 special issue (E. Fromont)
- Revue d'Intelligence Artificielle (RIA, T. Guyet)

10.1.3.2. Reviewer - Reviewing Activities

- Remote Sensing (T. Guyet)
- Journal of Biomedical Informatics (T. Guyet)
- Journal of Machine Learning (T. Guyet)
- Artificial Intelligence Review (T. Guyet, L. Galárraga)
- Annals of Mathematics and Artificial Intelligence (T. Guyet)
- Data Mining and Knowledge Discovery (L. Galárraga, A. Termier)
- Information Systems (L. Galárraga)

10.1.4. Invited Talks

- Invited to the Dagstuhl Seminar 18401 on "Automating Data Science", Germany (E. Fromont and A. Termier)
- Invited talk for the IA² (Autumn school) organized by the GDR IA. (E. Fromont)
- Invited talk for the Labex Henri Lebesgue at Technicolor, Rennes. (E. Fromont)
- Invited talk for the "Transfer Learning: From Theory to Applications" summer school in Cachan. (E. Fromont)
- Invited talk for the conference "Brain Hack", Rennes. (E. Fromont)
- Invited talk for the Machine Learning Meetup, Rennes. (E. Fromont)
- Invited talks by ONERA, LAAS, Strasbourg University (T. Guyet)
- Keynote talk at CITT 2018 (International Conference on Technology Trends), Universidad Técnica de Babahoyo, Ecuador (L. Galárraga)

10.1.5. Scientific Expertise

- Member of an ANR (CE 23) evaluation committee (E. Fromont)
- Working group initiated by ALLISTENE about a Research Infrastructure for AI in France. It was proposed in the "Villani report" under the name GENIAL (Grand Equipement National pour l'Intelligence Artificielle)
- Evaluation of an ERC proposal (A. Termier)
- Evaluation of a project proposal for Université Catholique de Louvain (A. Termier)
- Evaluation of projects proposals for ANR (T. Guyet: 3 projects, A. Termier: 1 project)
- Evaluation of a project proposal for Pays de Loire Region (A. Termier)
- Audit of the AI activities of a major French industrial group with a group of Inria experts (A. Termier)

10.1.6. Research Administration

- Elected (college A) at IRISA research institute scientific council (E. Fromont)
- Nominated at the scientific council of the "Fondation Blaise Pascal", dedicated to scientific mediation (E. Fromont)

- Co-chair of the national evaluation committee of INRA Engineers (section Mathematics and Informatics) (T. Guyet)
- Member of INRA (National Agronomy Institute) Scientific Committee (A. Termier)

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Some members of the project-team LACODAM are also faculty members and are actively involved in computer science teaching programs in ISTIC, INSA and Agrocampus-Ouest. Besides these usual teachings LACODAM is involved in the following programs:

1. Master 2 IL, CCN: Option Machine Learning, Istic, University of Rennes 1, 32h (E. Fromont)
2. Master 2 DMV Module: Data Mining and Visualization, 13h, M2, Istic, University of Rennes 1 (A. Termier)
3. Master 1 SIF: Option IA, Istic, 20h University of Rennes 1 (A. Termier, E. Fromont)
4. Master 2 DataViz with R 10h, Computer Science for BigData 30h, Master Datascience, Agrocampus Ouest Rennes (Louis Bonneau, C. Largouët)
5. Master 1 Scientific Programming, Data Management, Agrocampus Ouest Rennes (C. Largouët)
6. INSA 4 Project Interpretability of Time series Machine Learning algorithms. (L. Rozé, M. Guillemé)

10.2.2. Supervision

PhD defended in 2018: Yann Dauxais, "Query-language for Care-pathway Mining and Analysis", 01/02/2015, D. Gross-Amblard, T. Guyet, A. Happe

PhD defended in 2018: Clément Gautrais, "Mining Massive Data from Client Purchases", 01/10/2015, A. Termier, P. Cellier, T. Guyet and R. Quiniou

PhD defended in 2018: Romain Deville, "Fouille de Grilles Spatio-temporelles Appliquée à la Classification d'Images et à l'Analyse d'Automates Cellulaires", 30/05/2018, E. Fromont, C. Solnon (Lyon), B. Jeudy (Saint-Etienne).

PhD in progress: Maël Guillemé, "New Data Mining Approaches for Improving Energy Consumption in Factories", 03/10/2016, L. Rozé, V. Masson, A. Termier

PhD in progress: Maël Gueguen, "Improving the Performance and Energy Efficiency of Complex Heterogeneous Manycore Architectures with On-chip Data Mining", 01/11/2016, O. Sentieys, A. Termier

PhD in progress: Alban Siffer, "Data Mining Approaches for Cyber Attack Detection", 03/2016, P-A Fouque, A. Termier, C. Largouët.

PhD in progress: Colin Leverger, "Cluster Resources Optimization Through Forecasting and Management of Metric Time Series", 01/10/2017, T. Guyet, S. Malinowski, R. Marguerie, A. Termier

PhD in progress: Raphaël Gauthier, "Modelling of Nutrient Utilization and Precision Feeding of Lactating Sows", 01/11/2017, C. Largouët, J.-Y. Dourmad

PhD in progress: Kévin Fauvel, "Using Data mining Techniques for Improving Dairy Management", 01/10/2017, V. Masson, A. Termier, P. Faverdin

PhD in progress: Anh Duong Nguyen, "Compression Based Pattern Mining", 01/03/2018, R. Gaudel, P. Cellier, A. Termier

PhD in progress: Johanne Bakalara, "Temporal Model of Care pathway to Query Medico-administrative Databases", 01/10/2018, T. Dameron O., Oger E., Guyet, S. A. Happe

PhD in progress: Erwan Bourrand, "Interactive Data Mining for Root Cause Analysis of Performance Issues in Networks", 03/12/2018, L. Galárraga, E. Fromont, A. Termier

PhD in progress: Heng Zhang, “Deep Learning on Multimodal Data for the Supervision of Sensitive Sites”, 03/12/2018, E. Fromont, S. Lefevre

PhD in progress: Yichang Wang, “Interpretable Shapelet for Anomaly Detection in Time Series”, 15/04/2018, E. Fromont, S. Malinowski, R. Tavenard, R. Emonet

10.2.3. Juries

- PHD defenses (E. Fromont): Jean Ogier, Paris (reviewer); Maxime Chabert, Lyon (committee member); Wissam Siblini, Nantes (committee member, president); Michaël Blot, Paris (committee member, president); Nicolas Audebert, Paris (committee member, president); Hoang Viet Tuan Nguyen, Annecy (reviewer); Soufiane Belharbi, Rouen (reviewer); Romain Deville, Lyon (supervisor); Bastien Moysset, Lyon (reviewer); Géraud Le Falher, Lille (committee member).
- Reviewer for the HDR defense of Claude Pasquier (Univ. Nice), defended on 20/09/2018 (A. Termier)
- Examiner for the HDR defense of Marc Plantevit (Univ. Lyon 1), defended on 14/12/2018 (A. Termier)
- Committee member for the PhD defense of Clément Gautrais (Univ. Rennes), defended on 16/10/2018 (A. Termier, T. Guyet, R. Quiniou)
- Committee member for the PhD defense of Yann Dauxais (Univ. Rennes), defended on 13/04/2018 (T. Guyet)
- Member of the hiring committee for Lille MCF27-0076, Paris-Sud PR27-0122, Saint-Etienne TSE MCF27-511 as president (E. Fromont)
- Member of the INRA research hiring committee on 25/04/2018 (MIA/INRA) (T. Guyet)
- Member of the associate professor hiring committee on 23/04/2018 (LERIA/Univ. Angers) (T. Guyet)
- Member of the associate professor hiring committee MCF0942 of Polytech Nancy (A. Termier)
- Thesis advisory committee member:
 - T. Guyet: Caglayan Tuna (UBS)
 - A. Termier: Mathilde Chen (INRA), Lucas Bourneuf (Univ. Rennes)

10.3. Popularization

10.3.1. Interventions

- Public debate on Artificial Intelligence at Café des Champs-Libres, Rennes (E. Fromont)
- Radio C-LAB, invited to the "Mars 2081" show on AI. (E. Fromont)
- Invited member to the focus group "Transition numérique et pratiques de recherche et d'enseignement en agriculture, alimentation, environnement et sciences vétérinaires à l'échéance 2040" (T. Guyet)
- Intervention at the Pint of Science 2018 event, topic: Artificial Intelligence and Data Science (A. Termier)
- Invited talk at "Matinale Rennes Atalante", Rennes (A. Termier, 22/12/2018)⁰.
- Invited talk at Lacroix-Sofrel industrial group (A. Termier)
- Invited talk at the kickoff the OpenLab PSA-Inria, where Lacodam is actively involved (A. Termier)
- Invited talk at the conference *IN'Sciences "Big data : comment combiner intelligence artificielle et gestion de données ?"* (L. Galárraga, chaired by L. Rozé)

⁰Video: <http://www.rennes-atalante.fr/actualites-technopole/captations-matinales-rennes-atalante/2018/visionnez-la-matinale.html>

LINKS Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

- F. Capelli: workshop organisation of *Graph and Constraints* (27/08) within the conference Constraint Programming (CP) 2018, Lille.
- F. Capelli: organisation of annual meeting of GT ALGA (Groupe de Travail Automata, Logic, Games, Algebra of CNRS) the 15th and 16th of October at Lille.

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

- J. Niehren was is was chair of the Program Committee of WPTE 2018.
- J. Niehren was is was co-chair of the Program Committee of WPTE 2019.

10.1.2.2. Member of the Conference Program Committees

- F. Capelli: member of Program Committee of International Joint Conference on Artificial Intelligence (IJCAI) 2018.
- F. Capelli: member of Program Committee of workshop Quantified Boolean Formulas (QBF) within FLoC conference (Federated Logic Conference).
- F. Capelli: member of Program Committee of workshop Graph and Constraints, 2018.
- S. Tison: member of Program Committee of RAIRO ITA, 2018.
- J. Niehren: member of the Program Committee of LATA 2019.

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- J. Niehren is editor of *Fundamenta Informaticæ*.
- S. Salvati is managing editor of JoLLI (Journal for Logic, Language and Information).
- S. Tison is in the editorial committee of RAIRO-ITA (Theoretical Informatics and Applications).

10.1.4. Invited Talks

- B. Guillon gave invited talks at Mid-term Meeting of ANR Delta in Bordeaux in December 2018.
- A. Lemay gave invited talks at Mid-term Meeting of ANR Delta in Bordeaux in December 2018.
- Joachim Niehren gave an invited talk at the American University of Palestine in August 2018.
- F. Capelli get invited to talk at seminars of CRIL at Lens, LACL in Créteil and VALDA in Paris.

10.1.5. Scientific Expertise

- S. Tison: member of coordinator of i-SItE ULNE, about innovation and relationship with social economical world.
- S. Tison: Head of CITC-Eurarfid.
- J. Niehren is member of the board of the committee of project-teams of Inria Lille.

10.1.6. Research Administration

- F. Capelli: Co-organizer of *Groupe de Travail* of CNRS IMIA (Informatique Mathématique Intelligence Artificielle)

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

- I. Boneva gives a Master 1 semester on Algorithms for databases.
- C. Paperman is pedagogical responsible for Master MIASHS “parcours” WebAnalyste.
- A. Lemay is pedagogical responsible for Computer Science and Numeric correspondent for UFR LEA.
- J. Niehren was teaching the course “Foundations of Databases” as part of the masters 2 Mocad on Information Extraction at the University of Lille.
- S. Salvati is pedagogical responsible of Master Miage FA, Lille.
- S. Salvati organized the research label for Computer Science Bachelor, Lille.
- S. Tison is pedagogical responsible of first year ACT Master, Lille.

10.2.2. Supervision

- HdR : Aurélien Lemay, *Machine Learning Techniques for Semistructured Data*, Université de Lille, Fri 16th Nov.
- PhD in progress: N. Crosetti. Privacy Risks of Aggregates in Data Centric-Workflows. Supervised by Capelli, Niehren, Ramon (Team MAGNET) and Tison.
- PhD in progress: D. Gallois. Since 2015. Recursive Queries. Supervised by Bourhis and Tison.
- PhD in progress: M. Sakho. Hyperstreaming Query answering on graphs. Since 2016. Supervised by Niehren and Boneva.
- PhD in progress: J.M. Lozano. On data integration for mixed database formats. Supervised by Boneva and Staworko.
- PhD in progress: P. Gallot. On safety of data transformations. Started on October 2017. Supervised by Lemay and Salvati.

10.2.3. Juries

- S. Tison: Vice-Présidente du jury Agrégation de Mathématiques (co-pilote option D- Informatique).
- S. Tison: Jury de Thèse Lucien Mousin.
- S. Tison: PhD Committee of Narjes Jomaa.
- F. Capelli: PhD Committee of Mikael Monet.
- J. Niehren: Habilitation Committee of Aurélien Lemay.

10.3. Popularization

10.3.1. Internal action

General Assembly of Inria Lille Niehren presented Links work on data and knowledge bases on the Dynamic Semantic Crosswords demonstration during a general assembly of Inria Lille in July 2018.

10.3.2. Creation of media or tools for science outreach

Dynamic Semantic Crosswords Bacquey’s demonstration system on dynamic semantic crosswords is presented in the new showroom of Inria Lille in the new building Place. The demo generates dynamically crosswords while streaming Twitter feeds, depending on a semantic topic specified by the user. The specification can be given by a list of hashtags, and in the future by a XPath 3.0 query, that can be executed on streams by using Links QuiXPath tool. This illustrates the work on complex event processing by Niehren and his students during the last years.

MAGNET Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. Member of the Organizing Committees

- AURÉLIEN BELLET was a member of the organization committee of the PPML workshop at NeurIPS'18.⁰ The workshop was on Privacy Preserving Machine Learning and had among its invited speakers Shafi Goldwasser (Gödel and Turing Prize), Adam Smith (Gödel Prize).
- AURÉLIEN BELLET co-organized the kick-off workshop of the associated team PAD-ML with the Alan Turing Institute.⁰ The workshop was held at Inria Lille and featured speakers from MAGNET and the Alan Turing Institute.

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

- AURÉLIEN BELLET served as PC member for AISTATS'19, ICML'18, NIPS'18, IJCAI'18 Sister Conference, PiMLAI workshop at ICML'18, and CAP'18.
- PASCAL DENIS served as PC member for ACL'18, CONLL'18, EMNLP'18, NAACL'18, NIPS'18, IJCAI-ECAI'18 (Senior PC), CRAC Workshop at NAACL'18.
- MARC TOMMASI served as PC member for AAI'18, ICML'18, CAP'18, IJCAI'18 (Senior PC chair), AISTATS'18, NIPS'18.
- JAN RAMON served as PC member for AAI'19, AISTATS'19, IEEE-BigData'18, CIKM'18, DS'18, ECML/PKDD'18, EKAW'18, IEEE-ICDM'18, ICML'18, ILP'18, LOD'18, MLG'18, NIPS'18, SDM'18, TDLGS'18.
- MIKAELA KELLER served as PC member for ICML'18, CAP'18.
- RÉMI GILLERON served as PC member for NIPS'18, CAP'18, AISTATS'19 and ICLR'19.

10.1.3. Journal

10.1.3.1. Reviewer - Reviewing Activities

- AURÉLIEN BELLET was reviewer for Machine Learning Journal and IEEE/ACM Transactions on Networking.
- PASCAL DENIS was reviewer for Computational Linguistics, IJCAI-ECAI Surveys, and Language Resources and Evaluation.
- JAN RAMON was member of the editorial boards of Machine Learning Journal (MLJ) and Data Mining and Knowledge Discovery (DMKD). JAN RAMON was reviewer for among others JMLR, TPAMI, JIIS.

10.1.4. Invited Talks

- AURÉLIEN BELLET gave invited talks at the EPFL-Inria 2018 workshop⁰ and the Journées de Statistique 2018 (session SSFAM).⁰
- AURÉLIEN BELLET was invited to talk at the seminars of Inria WIDE, Télécom ParisTech, Statistics Seminar of Paris 6/7, CMLA (ENS Paris Saclay) and Naver Labs Europe.
- PASCAL DENIS gave an invited talk at the Séminaire Langage, SCALab, Université de Lille, 26/01/18.

⁰<https://neurips.cc/Conferences/2018/Schedule?showEvent=10934>

⁰<https://team.inria.fr/magnet/workshop-on-privacy-aware-distributed-machine-learning/>

⁰<https://project.inria.fr/epfl-Inria/workshops/workshop-2018/>

⁰<http://jds2018.sfds.asso.fr/>

10.1.5. Scientific Expertise

- AURÉLIEN BELLET was a member of the jury for the Gilles-Kahn PhD award of the French Society of Computer Science (SIF), sponsored by the French Academy of Sciences.⁰
- AURÉLIEN BELLET acted as external reviewer for the French National Research Agency (ANR), track “Projets de Recherche Collaborative – International”.
- JAN RAMON was an external reviewer for the Swiss National Science Foundation (SNF).
- JAN RAMON was an external reviewer for the Vienna Science and Technology Fund (WWTF).
- JAN RAMON acted as an expert for the H2020 CoE and IMI programs.

10.1.6. Research Administration

- MIKAELA KELLER is member of the Conseil du laboratoire CRISAL.
- FABIEN TORRE is member of the bureau du Conseil National des Universités (section 27).
- PASCAL DENIS served as a member of the CNRS Pre-GDR NLP Group.
- PASCAL DENIS was elected to Comité National du CNRS, section 34 (Sciences du Langage).

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Licence SHS: JOËL LEGRAND, Traitement de textes et tableur, 10h, L1, Université Lille.

Licence SHS: MARC TOMMASI, Langages du Web, 24h, L2, Université Lille.

Licence MIASHS: MIKAELA KELLER, Python 1, 40h, L1, Université Lille.

Licence MIASHS: MARC TOMMASI, Codage et représentation de l’information, 48h, L1, Université Lille.

Licence MIASHS: MIKAELA KELLER, Codage et représentation de l’information, 42h, L1, Université Lille.

Licence SoQ (SHS): MIKAELA KELLER, Algorithmique de graphes, 24h, L3, Université Lille.

Licence MARC TOMMASI C2i 12h, Université Lille.

Licence MARC TOMMASI Humanités numériques - Découvrir et faire découvrir la programmation, 20h, Université Lille/

Master MIASHS: MIKAELA KELLER, Algorithmes fondamentaux de la fouille de données, 60h, M1, Université Lille.

Master MIASHS: JOËL LEGRAND, Apprentissage et émergence de comportements, 30h, M2, Université Lille.

Master Data Analysis & Decision Making: AURÉLIEN BELLET, Machine Learning, 12h, Ecole Centrale de Lille.

Master / Master Spécialisé Big Data: AURÉLIEN BELLET, Advanced Machine Learning, 15h, Télécom ParisTech.

Formation continue (Certificat d’Études Spécialisées Data Scientist): AURÉLIEN BELLET, Supervised Learning and Support Vector Machines, 17.5h, Télécom ParisTech.

Master Informatique: PASCAL DENIS, Fondements de l’Apprentissage Automatique, 46h, M1, Université de Lille.

10.2.2. Supervision

Postdoc: MELISSA AILEM, InriaSiliconValley postdoctoral grant, supervised by AURÉLIEN BELLET, MARC TOMMASI, PASCAL DENIS and FEI SHA (University of Southern California).

⁰<https://www.societe-informatique-de-france.fr/recherche/prix-de-these-gilles-kahn/>

Postdoc: BO LI, supervised by PASCAL DENIS on ANR REM, Model Sense Disambiguation, since December 2017.

PhD: GÉRAUD LE FALHER, Characterizing edges in signed and vector-valued graphs. April 16th 2018, MARC TOMMASI and FABIO VITALE and CLAUDIO GENTILE.

Phd: ASHRAF M. KIBRIYA, Mining Frequent Patterns in Large Networks, June 2018, JAN RAMON.

PhD in progress: MATHIEU DEHOUCK, Graph-based Learning for Multi-lingual and Multi-domain Dependency Parsing, since Oct 2015, PASCAL DENIS and MARC TOMMASI.

PhD in progress: ONKAR PANDIT, Graph-based Semi-supervised Linguistic Structure Prediction, since Dec. 2017, PASCAL DENIS, MARC TOMMASI and LIVA RALAIVOLA (University of Marseille).

PhD in progress: MARIANA VARGAS VIEYRA, Adaptive Graph Learning with Applications to Natural Language Processing, since Jan. 2018. PASCAL DENIS and AURÉLIEN BELLET and MARC TOMMASI.

PhD in progress: BRIJ SRIVASTAVA, Representation Learning for Privacy-Preserving Speech Recognition, since Oct 2018 AURÉLIEN BELLET and MARC TOMMASI and EMMANUEL VINCENT.

PhD in progress: MAHSA ASADI, On Decentralized Machine Learning, since Oct 2018. AURÉLIEN BELLET and MARC TOMMASI.

PhD in progress: NICOLAS CROSETTI, Privacy Risks of Aggregates in Data Centric-Workflows, since Oct 2018. FLORENT CAPELLI and SOPHIE TISON and JOACHIM NIEHREN and JAN RAMON.

PhD in progress: ROBIN VOGEL, Learning to rank by similarity and performance optimization in biometric identification, since 2017 (CIFRE thesis with IDEMIA and Télécom ParisTech). AURÉLIEN BELLET, STÉPHAN CLÉMENÇON and ANNE SABOURIN.

10.2.3. Juries

- AURÉLIEN BELLET was member of the PhD jury of Guillaume Papa (Télécom ParisTech), Wenjie Zheng (Sorbonne Université), Michael Blot (Sorbonne Université).
- MARC TOMMASI was member of the Phd jury of Gaëtan Hadjeres (*Rapporteur*), Alexandre Bérard (*Head*), Olivier Ruas (*Rapporteur*), Valentina Zantedeschi.
- PASCAL DENIS was *rapporteur* on the Phd jury of Elena Knyazeva, Université Paris-Saclay.
- MIKAELA KELLER was member of the recruitment committee for Assistant Professors in Computer Science at Université of Lille and at Université de St-Étienne.
- MIKAELA KELLER was member of the Phd jury of Damien Fourure (Université de St-Étienne) and of the HDR jury of Renaud Lopes (CHRU Lille).
- RÉMI GILLERON was head of the PhD jury of Romain Warlop (Université de Lille).
- PASCAL DENIS was a member of hiring committee for Junior Research Scientist at Inria Lille.
- MARC TOMMASI was member of the recruitment committee Assistant Professors in Computer Science at Université of Lille and for professor position at INSA de Lyon.

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- AURÉLIEN BELLET is the scientific mediation contact for Inria Lille center.
- PASCAL DENIS served as committee member on the Inria Lille Commission Emploi Recherche (CER).
- PASCAL DENIS also served as committee member on Commission de Développement Technologique (CDT).

- PASCAL DENIS is administrator of Inria membership to Linguistic Data Consortium (LDC).

10.3.2. Articles and contents

- AURÉLIEN BELLET and MARC TOMMASI provided expertise for an upcoming TV program on Arte about new technologies.

10.3.3. Interventions

- National events: JAN RAMON and MARC TOMMASI participate to a round-table meeting at the *Fête des libertés numériques* for the RGPD day ⁰.
- In educational institutions: MARC TOMMASI gave a talk on privacy and machine learning in Journées polytech ⁰.

⁰https://www.meshs.fr/page/donnees_personnelles_et_droits_et_libertes_numeriques

⁰<http://www.polytech-lille.fr/big-data-machine-mearning-p11419.html#.WqIHjExFxPb>

MOEX Project-Team

6. Dissemination

6.1. Promoting Scientific Activities

6.1.1. Scientific Events Organisation

6.1.1.1. Member of the Organizing Committees

- Jérôme David had been organiser of the workshop Symbolic methods for data-interlinking of the 21st EKAW, Nancy (FR), 2018 (with Miguel Couceiro)
- Jérôme Euzenat had been organiser of the 13th Ontology matching workshop of the 18th ISWC, Monterey (CA US), 2018 (with Pavel Shvaiko, Ernesto Jiménez Ruiz, Michele Cheatham and Otkie Hassanzadeh)

6.1.2. Scientific Events Selection

6.1.2.1. Chair of Conference Program Committees

- Jérôme Euzenat had been program chairman of the “French national artificial intelligence conference (CNIA)” [10], Nancy (FR), 2018.
- Manuel Atencia had been workshop and tutorial chairman (with Marieke van Erp) of the 21st EKAW, Nancy (FR), 2018.

6.1.2.2. Member of the Conference Program Committees

- Jérôme David and Jérôme Euzenat had been programme committee members of the “International joint conference on artificial intelligence (IJCAI)” 2018
- Jérôme David and Jérôme Euzenat had been programme committee member of the “National conference on artificial intelligence (AAAI)” 2018
- Manuel Atencia and Jérôme Euzenat had been programme committee members of the “International semantic web conference (ISWC)” 2018
- Jérôme David and Jérôme Euzenat had been programme committee members of the “European Semantic Web Conference (ESWC)” 2017
- Manuel Atencia, Jérôme David and Jérôme Euzenat had been programme committee member of the “Web Conference (www)” 2018
- Jérôme David had been programme committee member of the “Pacific Rim Knowledge Acquisition Workshop (PKAW)” 2018
- Jérôme Euzenat had been programme committee member of the “International Conference on Semantic Systems (Semantics)” 2018
- Jérôme Euzenat had been programme committee member of the “International conference on knowledge engineering and knowledge management (EKAW)” 2018
- Jérôme David had been programme committee member of the “French national artificial intelligence conference (CNIA)” 2018.
- Jérôme Euzenat had been programme committee member of the “French fundamental artificial intelligence days (JAIF)” 2018
- Manuel Atencia and Jérôme David had been programme committee members of the ISWC “Ontology matching” workshop (OM) 2018
- Manuel Atencia and Jérôme David had been programme committee members of the “French Extraction and gestion des connaissances conference (EGC)” 2018

- Jérôme David had been programme committee member of the “29es Journées francophones d’ingénierie des connaissances (IC)” 2018

6.1.3. Journal

6.1.3.1. Member of the Editorial Boards

- Jérôme Euzenat is member of the editorial board of *Journal of web semantics* (area editor), *Journal on data semantics* and the *Semantic web journal*.
- Jérôme Euzenat had been guest editor of a special issue of *Semantic web journal* on “semantic technologies and interoperability in the build environment” (with Álvaro Sicilia, Pieter Pauwels, Leandro Madrazo, and María Poveda-Villalón).

6.1.3.2. Reviewer - Reviewing Activities

- Manuel Atencia had been reviewer for *Journal of web semantics* and *Applied ontology*.
- Jérôme David had been reviewer for *Information system journal* and *Ingénierie des systèmes d’information* (special issue on “Impact des Open et/ou Linked Data dans les systèmes d’information”).
- Jérôme Euzenat had been reviewer for *ACM transactions on the web*, and *International journal on metadata, semantics and ontologies*.

6.1.4. Invited Talks

- “Towards cultural knowledge evolution: experiments with alignments repair”, Seminar LIP6, Paris (FR), 2018-10-15 (Jérôme Euzenat)
- “Enhancing Link Keys: Extraction and Reasoning”, **BNF workshop on “Données liées et données à lier: quels outils pour quels alignements?”**, Paris (FR), 2018-07-10 (Manuel Atencia)
- “Link key extraction with a variation of relational concept analysis”, EKAW workshop on symbolic methods for data interlinking, Nancy (FR), 2018-11-12 (Jérôme Euzenat)

6.1.5. Leadership within the Scientific Community

- Jérôme Euzenat is member of the scientific council of the CNRS GDR “Intelligence artificielle”.

6.1.6. Scientific Expertise

- Manuel Atencia had been evaluator for CAPES-COFECUB projects (BR)
- Jérôme Euzenat had been member of the scientific evaluation committee “CE23: Data, knowledge, big data, multimedia content – artificial intelligence” of the French national research agency (ANR)
- Manuel Atencia had been evaluator for the French national research agency (ANR)

6.2. Teaching - Supervision - Juries

6.2.1. Teaching

- Jérôme David is coordinator of the Master “Mathématiques et informatiques appliquées aux sciences humaines et sociales” (Univ. Grenoble Alpes)
- Manuel Atencia is co-responsible of the Master 2nd year “Mathématiques et informatiques appliquées aux sciences humaines et sociales” (Univ. Grenoble Alpes)
- Jérôme Euzenat had been, with Danielle Ziébelin, coordinator of the “AI and the web” option of the M2R in computer science and applied mathematics (Univ. Grenoble Alpes)

6.2.1.1. Lectures

Licence: Jérôme David, Algorithmique et programmation par objets, 70h, L2 MIASHS, UGA, France

Licence: Jérôme David, Introduction à Python, Licence ESSIG, 24h, UGA, France

Licence: Jérôme David, Système, L3 MIASHS, 18h, UGA, France
 Licence: Manuel Atencia, Technologies du web, LP ESSIG, 18h, UGA, France
 Licence: Manuel Atencia, Introduction aux technologies du Web, 60h, L3 MIASHS, UGA, France
 Master: Jérôme David, Programmation Java 2, 30h, M1 MIASHS, UGA, France
 Master: Jérôme David, JavaEE, 30h, M2 MIASHS, UGA, France
 Master: Jérôme David, Développement Web Mobile, 30h, M2 MIASHS, UGA, France
 Master: Jérôme David, Web sémantique, 3h, M2 MIASHS, UGA, France
 Master: Manuel Atencia, Formats de données du web, 15h, M1 MIASHS, UGA, France
 Master: Manuel Atencia, Introduction à la programmation web, 30h, M1 MIASHS, UGA, France
 Master: Manuel Atencia, Intelligence artificielle, 7.5h, M1 MIASHS, UGA, France
 Master: Manuel Atencia, Web sémantique, 27h, M2 MIASHS, UGA, France
 Master: Manuel Atencia, Semantic web: from XML to OWL, 22.5h, M2R MoSIG, UGA, France
 Master: Jérôme David, Stage de programmation, 10h, M2 MIASHS, UGA, France

6.2.2. Supervision

- PhD in progress : Nacira Abbas, “Link key extraction and relational concept analysis”, 2018-10-01 (Jérôme David and Amedeo Napoli)
- PhD in progress : Khadija Jradeh, “Reasoning with link keys”, 2018-10-01 (Manuel Atencia and Chan Le Duc)
- PhD in progress : Line van den Berg, “Knowledge Evolution in Agent Populations”, 2018-10-01 (Manuel Atencia and Jérôme Euzenat)
- MSc: Iris Lohja, “Improving semantic recall of ontology alignments in cultural knowledge evolution”, M2R Informatics, Univ. Grenoble Alpes, June 2018 (Manuel Atencia and Jérôme Euzenat)
- MSc: Khadija Jradeh, “Link key extraction under ontological constraints”, M2R Informatics, Univ. Grenoble Alpes, June 2018 (Jérôme David and Jérôme Euzenat)

6.2.3. PhD panels

- Jérôme David had been panel member of the computer science PhD of Valentina Beratta (IMT Mines Alès) “Évaluation de la véracité des données: améliorer la découverte de la vérité en utilisant des connaissances a priori” supervised by Sylvie Ranwez and Isabelle Mougenot
- Jérôme Euzenat had been panel member of the computer science PhD of Paula Chocrón (Universitat Autònoma de Barcelona) “A pragmatic approach to translation: vocabulary alignment through multiagent interaction and observation” supervised by Marco Schorlemmer
- Jérôme Euzenat had been panel chair of the computer science PhD of Louis Jachiet (Université Grenoble-Alpes) “On the foundations for the compilation of web data queries: optimization and distributed evaluation of SPARQL” supervised by Nabil Layaïda and Pierre Genevès
- Jérôme Euzenat had been reviewer of the computer science habilitation of Chan Le Duc (Université Paris 8) “Raisonnement et révision pour des ontologies en logique de description”
- Jérôme Euzenat is member of the PhD supervision committee of Élodie Thiéblin (Université de Toulouse 2-Jean Jaurès) supervised by Ollivier Haemmerlé and Cássia Trojahn dos Santos

6.3. Popularization

6.3.1. Interventions

- Jérôme Euzenat gave a talk on “Artificial intelligence: a broad view” to BEST Spring course, Grenoble (FR), 2018-04-16
- Jérôme Euzenat gave a talk on “mOeX: évolution de la connaissance” Inria “Mon projet en 180 secondes”, Grenoble (FR), 2018-05-29
- Jérôme Euzenat gave a talk on “Evolving knowledge: different facets of Artificial Intelligence” to the French-American Doctoral Exchange (FADEX) seminar, Grenoble (FR), 2018-06-27

ORPAILLEUR Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organization, General Chairs, Scientific Chairs

- Amedeo Napoli and Yannick Toussaint were the general chairs of the “21th International Conference on Knowledge Engineering and Knowledge Management” (EKAW 2018, <https://project.inria.fr/ekaw2018/>) held on November 12–16 2018 at Inria NGE/LORIA Nancy.
- Amedeo Napoli was the program chair with Sergei O. Kuznetsov (HSE Moscow) and Sebastian Rudolph (TU Dresden) of the sixth workshop FCA4AI (“What can do FCA for Artificial Intelligence”) co-located with the IJCAI-ECAI Conference in Stockholm, July 13 2018 (<http://fca4ai.hse.ru/> and <http://ceur-ws.org/Vol-2149/>).
- Amedeo Napoli was the co-chair with Sergei Kuznetsov of the track “General Topics of Data Analysis” at the AIST Conference in Moscow on July 5–7 2018 (7th International Conference on Analysis of Images, Social Networks, and Texts <http://aistconf.org/> and <http://aistconf.org/board/>).
- Miguel Couceiro was an organizer of the tutorial on “Majority Logic Synthesis” at the International Conference On Computer Aided Design (ICCAD 2018, <https://iccad.com/agenda/embedded-tutorials>, [23]).
- Miguel Couceiro and Jérôme David (Inria Rhône Alpes, MOEX) were the organizers of the workshop “Symbolic methods for data-interlinking” co-located with EKAW 2018 (<https://project.inria.fr/ekaw2018/workshops/>). This workshop was organized in the framework of EKAW 2018 and of the ANR project ELKER.

9.1.2. Scientific Animation

- The scientific animation in the Orpailleur team is based on the Team Seminar which is called the “Malotec” seminar (<http://malotec.loria.fr/>). The Malotec seminar is held in general twice a month and is used either for general presentations of members of the team or for invited presentations of external researchers.
- Members of the Orpailleur team are all involved, as members or as head persons, in various national research groups.
- The members of the Orpailleur team are involved in the organization of conferences and workshops, as members of conference program committees (AAAI, ECAI, ECML-PKDD, ESWC, ICCBR, ICDM, ICFCA, IJCAI, ISWC, KDD, SDM...), as members of editorial boards, and finally in the organization of journal special issues.

9.2. Teaching - Supervision - Juries

- All the permanent members of the Orpailleur team are involved in teaching at all levels and mainly at University of Lorraine. Actually, most of the members of the Orpailleur team are employed on “Université de Lorraine” positions.
- The members of the Orpailleur team are also involved in student supervision, at all university levels, from under-graduate until post-graduate students, engineers, PhD, postdoc students.
- Finally, the permanent members of the Orpailleur team are involved in HDR and thesis defenses, being thesis referees or thesis committee members.

PETRUS Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organization

10.1.1.1. Member of the Organizing Committees

- Luc Bouganim: Co-organizer of Ecole thématique BDA Masses de Données Distribuées, Aussois, June 2018
- Iulian Sandu Popa: 34ème Conférence sur la Gestion de Données – Principes, Technologies et Applications (BDA 2018), Bucarest, 22-26 octobre 2018
- Iulian Sandu Popa: Colloque National Capteurs et Sciences Participatives (CASPA), Paris, 1-4 avril 2019

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

- Nicolas Ancaux: VLDB'18, VLDB'19, SIGMOD'19, DATA'18, BDA'18
- Luc Bouganim: Associate Editor for VLDB'18
- Philippe Pucheral: DATA'18, MOBILITY'18
- Iulian Sandu Popa: DATA'18, ICDE'19, IEEE MobileCloud'19

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- Nicolas Ancaux: Associate Editor of the VLDB Journal

10.1.3.2. Reviewer - Reviewing Activities

- Iulian Sandu Popa: ACM Transactions on Spatial Algorithms and Systems, IEEE Transactions on Parallel and Distributed Systems, Geoinformatica

10.1.4. Invited Talks

- Iulian Sandu Popa: "Highly Distributed Queries on Personal Data Management Systems with Strong Privacy Guarantees", New Jersey Institute of Technology (NJIT), Newark, April 9, 2018. https://web.njit.edu/cs/CS_Seminar/abstract.php?id=391
- Célia Zolynski and Nicolas Ancaux: "L'avènement d'une gestion individuelle de nos données personnelles. Regards croisés sur certains enjeux de vie privée", Kick-Off of the DATAIA Institute, Fev. 2018. slides: <http://petrus.inria.fr/~ancaux/papers/D36.pdf>
- Philippe Pucheral: "Privacy-by-Obligation: Une réponse au paradoxe du Cloud Personnel ?", Inria Scientific days, June 28th, 2018.
- Célia Zolynski and Nicolas Ancaux: "GDPR and Personal Cloud: from Empowerment to Responsibility (GDP-ERE)", DATAIA-JST International Symposium on Data Science and AI, July 2018. Link: <http://dataia.eu/actualites/dataia-jst-international-symposium-data-science-and-ai>, slides: http://dataia.eu/sites/default/files/DATAIA_JST_International_Symposium/DATAIA-JST_SYMPOSIUM_Nicolas_Anciaux_Celia_Zolynski.pdf
- Philippe Pucheral: "Protection de la vie privée : potentiel et paradoxe du Cloud Personnel", SystemX seminar, October 18th, 2018. <https://www.irt-systemx.fr/philippe-pucheral-animera-un-seminarsystemx-le-18-octobre/>

- Nicolas Ancaux: "Personal Data Management Systems using Trusted Execution Environments", Zenith seminar, Inria / Univ. Montpellier, Nov. 2018. <https://team.inria.fr/zenith/zenith-seminar-nicolas-anciaux-personal-data-management-systems-using-trusted-execution-environments-21-nov-2018/>

10.1.5. Research Administration

- Philippe Pucheral: Member of the HDR committee of the STV doctoral school (UVSQ) since 2014
- Philippe Pucheral: Member of the steering committee of the ED STIC doctoral school of University Paris-Saclay, 'Data, Knowledge and Interactions' committee (about 250 PhD students) since 2014
- Philippe Pucheral: Member of the bureau of the DAVID lab board since 2016
- Nicolas Ancaux: Member of the Council of the Doctoral College of the University Paris-Saclay
- Nicolas Ancaux: Correspondent for the Doctoral school ED STIC of University Paris-Saclay at Inria Saclay
- Nicolas Ancaux: Responsible for the 'Mission Jeunes Chercheurs' (MJC) at Inria Saclay
- Nicolas Ancaux: Responsible for the 'Formation par la Recherche' (FPR) at Inria Saclay
- Nicolas Ancaux: Member of the bureau of the DAVID lab board
- Luc Bouganim: Member of the Scientific Commission (CS) of Inria Saclay-IDF (Cordi-S, Post-Doc, Delegation)
- Luc Bouganim: Member of the Commission for Technological Development (CDT) of Inria Saclay-IDF

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

- Licence : Iulian Sandu Popa, Bases de données (niveau L3), 96, UVSQ, France. Guillaume Scerri, Initiation aux bases de données (niveau L2), 63, UVSQ, France. Guillaume Scerri, Fondements de l'informatique (niveau L1), 36, UVSQ, France. Guillaume Scerri, Théorie des Langages (niveau L2), 45, UVSQ, France.
- Master : Iulian Sandu Popa, Bases de données relationnelles (niveau M1), Gestion des données spatiotemporelles (niveau M2), Sécurité des bases de données (niveau M2), 96, UVSQ, France. Philippe Pucheral, responsable of the DataScale master, courses in M1 and M2 in databases and in security, introductory courses for jurists, UVSQ, France. Luc Bouganim, Bases de données relationnelles et XML (niveau M1 et M2), 40, AFTI, France. Guillaume Scerri, Bases de données relationnelles (niveau M1), 36, UVSQ, France. Guillaume Scerri, Sécurité et bases de données pour juristes, 4.5, UVSQ, France. Guillaume Scerri, Sécurité, 18, UVSQ, France.
- Engineers school : Nicolas Ancaux, courses on Databases (module IN206, niveau M1), 21, and Advanced databases (module ASI13, niveau M2), 24, at ENSTA ParisTech. Nicolas Ancaux, Systèmes d'Information "privacy by design" (niveau M1), 30, at ENSIIE Evry, France. Luc Bouganim, Systèmes d'Information "privacy by design" (niveau M1), 42, ENSIIE Evry et INSA CVL, France.

10.2.2. Supervision

- PhD : Paul Tran Van, Partage de documents sécurisé dans le Cloud Personnel, UVSQ, April 3, 2018, Nicolas Ancaux and Philippe Pucheral
- PhD in progress: Axel Michel, Secure Distributed Computations, October 2015, Benjamin Nguyen and Philippe Pucheral
- PhD in progress : Julien Loudet, Highly Distributed Queries on Personal Data Management Systems with Strong Privacy Guarantees, July 2016, Luc Bouganim and Iulian Sandu Popa

- PhD in progress: Riad Ladjel, Secure Distributed Computation for the Personal Cloud, October 2016, Nicolas Ancaix, Philippe Pucheral and Guillaume Scerri
- PhD in progress: Dimitris Tsoulovos, Privacy-by-design Middleware for Urban-scale Mobile Crowd-sensing, April 2017, Nicolas Ancaix and Valérie Issarny (Inria Mimove)
- PhD in progress: Robin Carpentier, Secure and efficient data processing in trusted execution environments for the personal cloud, October 2018, Nicolas Ancaix, Iulian Sandu Popa and Guillaume Scerri

10.2.3. Juries

- Nicolas Ancaix : Reviewer of the PhD of Sakina MAHBOUBI (Université de Montpellier, 21/11/2018)
- Luc Bouganim : Reviewer of the PhD of Arezki Laga (University of Bretagne Sud, 20/12/2018)

10.3. Popularization

- Nicolas Ancaix: "Respectez les données personnelles de vos clients avec PLUGDB", Inria Tech Talk, French Tech Central - Station F, 12 Dec. 2018. video: https://youtu.be/9y3VdMe_sAQ, slides: <https://french-tech-central.com/events/inria-tech-talk-respectez-les-donnees-personnelles-de-vos-clients-avec-plugdb/>
- Nicolas Ancaix: auditions de la mission de préfiguration du « Health Data Hub », DREES, July 2018. Slides: <http://petrus.inria.fr/~ancaix/papers/D39.pdf>
- Nicolas Ancaix: interview, magazine La Recherche N°535, Mai 2018, "IA : les défis de la stratégie française", pp.14-16, by Gautier Cariou. Link: <https://www.larecherche.fr/parution/mensuel-535>

TYREX Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific Events Organisation

8.1.1.1. Member of the Organizing Committees

- P. Genevès is member of the Organizing Committee of BDA 2019.
- A. Bonifati is a permanent member of ICDT Council (The International Conference on Database Theory).

8.1.2. Scientific Events Selection

8.1.2.1. Chair of Conference Program Committees

- A. Bonifati is Co-chair of the SIGMOD 2019 Workshops.

8.1.2.2. Member of the Conference Program Committees

- P. Genevès has been program committee member for the 27th International Joint Conference on Artificial Intelligence (IJCAI'18) and for the 23rd European Conference on Artificial Intelligence (ECAI'18) and for the 18th ACM Symposium on Document Engineering (DocEng'18).
- A. Bonifati has been program committee member of VLDB 2019, AAAI 2019, ICDE 2019, EDBT 2019, SIGMOD 2019 (senior PC member), PODS 2019, DEBS 2019, ICDT 2020.

8.1.2.3. Reviewer

- P. Genevès has been reviewer for the ICALP 2018, CHI 2018, and BDA 2018 conferences.
- C. Roisin has been reviewer for the 18th ACM Symposium on Document Engineering (DocEng'18).

8.1.3. Journal

8.1.3.1. Member of the Editorial Boards

- A. Bonifati is Associate Editor of ACM Trans. on Database Systems.
- A. Bonifati is Associate Editor of the VLDB Journal.

8.1.3.2. Reviewer - Reviewing Activities

- P. Genevès has been reviewer for the Sensors journal.

8.1.4. Invited Talks

- P. Genevès gave an invited talk for the Data Science in the Alps Workshop (March 20th, 2018): “On the Prediction of At-Risk Patient Profiles with Big Prescription Data”
- P. Genevès gave an invited seminar at the University of Fribourg (March 27th, 2018): “Queries for Trees and Graphs: Static Analysis and Code Synthesis”

8.1.5. Scientific Expertise

- C. Roisin has been designed as expert for the reviewing of a research proposal of the American University of Beirut.
- P. Genevès has been a scientific expert at ANRT for the CIFRE funding process.

8.1.6. Research Administration

- P. Genevès is responsible for the Computer Science Specialty at the Doctoral School MSTII (ED 217)

- P. Genevès has been Member of a Hiring Committee at IRIF.
- C. Roisin is a member of the CNU (Conseil National des Universités).
- C. Roisin is a member of the Inria Grenoble Inria-Hub committee.
- N. Layaïda is a member of the experts pool (selection committee) of the minalogic competitive cluster.
- A. Bonifati and N. Layaïda are members of the Scientific Board of Digital League, the digital cluster of Auvergne-Rhone-Alpes.
- A. Bonifati is coordinator of the theme « Masses de Données » at Liris and at « Fédération d'Informatique de Lyon » (FIL).

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

- Licence : C. Roisin, Programmation C, 12h eq TD, L2, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, Architecture des réseaux, 112h eq TD, L1, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, Services réseaux, 22h eq TD, L2, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, Introduction système Linux, 21h eq TD, L1, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, Système et réseaux, 14h eq TD, L3, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, Tutorat pédagogique de 4 apprentis, 20h eq TD, L3, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, Suivi pédagogique de 20 étudiants (responsable de la Licence Professionnelle MI-ASSR), 13h eq TD, L1, IUT2, Univ. Grenoble-Alpes
- Licence : N. Gesbert, 'Logique pour l'informatique', 45 h eq TD, L3, Grenoble INP
- Licence : N. Gesbert, 'Bases de la programmation impérative', 30 h eq TD, L3, Grenoble INP
- Master : N. Gesbert, academic tutorship of an apprentice, 10 h eq TD, M1, Grenoble INP
- Master : N. Gesbert, 'Fondements logiques pour l'informatique', 16 h 30 eq TD, M1, Grenoble INP
- Master : N. Gesbert, 'Construction d'applications Web', 21 h eq TD, M1, Grenoble INP
- Master : N. Gesbert, 'Analyse, conception et validation de logiciels', 30 h eq TD, M1, Grenoble INP
- N. Gesbert is responsible of the L3-level course 'logique pour l'informatique' (25 apprentices) and of the M1-level course 'construction d'applications Web' (72 students).
- P. Genevès is responsible and teacher in the the M2-level course 'Semantic Web: from XML to OWL' of the MOSIG program at UGA (36h)
- P. Genevès is responsible and teacher in the the M2-level course 'Accès à l'information: du web des données au web sémantique' of the ENSIMAG ISI 3A program at Grenoble-INP (30h)

8.2.2. Supervision

- PhD: Louis Jachiet, On the foundations for the compilation of web data queries: optimization and distributed evaluation of SPARQL, University Grenoble Alpes. PhD Thesis defended on September 15th, 2018. Co-supervised by Nabil Layaïda and Pierre Genevès.
- PhD in progress: Muideen Lawal, Cost models for optimizing compilers based on mu-terms, PhD started in October 2017, supervised by Pierre Genevès.
- PhD in progress: Raouf Kerkouche, Privacy-preserving predictive analytics with big prescription data, PhD started in October 2017, co-supervised by Pierre Genevès and Claude Castelluccia.
- PhD in progress: Fateh Boulmaiz, Distributed representations of large-scale graphs, PhD started in November 2017, co-supervised by Pierre Genevès and Nabil Layaïda.

- PhD in progress: Sarah Chlyah, Algebraic foundations for the synthesis of optimized distributed code, PhD started in March 2018, supervised by Pierre Genevès.
- PhD in progress: Amela Fejza, On the extended algebraic representations for analytical workloads, PhD started in October 2018, supervised by Pierre Genevès.

8.3. Popularization

- N. Layaida contributed to the special édition of the newspaper : Le Dauphiné libéré des enfants – C'est quoi le numérique ? – n°14 November-December 2018.
- P. Genevès presented the Tyrex team activities in 180 seconds in a dissemination event organized at Inria Montbonnot in June 2018.

8.3.1. Creation of media or tools for science outreach

- T. Michel built a mobile application for the Inria public showroom, Espace Login, called Login'AR. The application was designed to showcase the combination of indoor positioning with Augmented Reality capabilities. The application is now part of the permanent Login public exhibition. The application was developed with the help of four Grenoble INP interns (A. Convert, A. Fortecof, G. Montano and S.J. Tourangeau).

VALDA Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific Events Organisation

8.1.1.1. General Chair, Scientific Chair

- Luc Segoufin, chair of the steering committee of the conference series *Highlights of Logic, Games and Automata*

8.1.1.2. Member of the Organizing Committees

- Luc Segoufin and Pierre Senellart, co-organizers of École de Printemps en Informatique Théorique (EPIT) 2019
- Pierre Senellart, co-organizer of ACM-ICPC Southwestern Europe 2018 competition

8.1.2. Scientific Events Selection

8.1.2.1. Chair of Conference Program Committees

- Pierre Senellart, RoD (Reasoning on Data) workshop at The Web Conference 2018 (co-chair)

8.1.2.2. Member of the Conference Program Committees

- Camille Bourgaux, AAI 2019
- Olivier Cappé, COLT 2018, ALT 2019
- Pierre Senellart, BDA 2018, PODS 2019
- Michaël Thomazo, IJCAI 2018, AAI 2019

8.1.3. Journal

8.1.3.1. Member of the Editorial Boards

- Olivier Cappé, associate editor, *Annals of the Institute of Statistical Mathematics*

8.1.3.2. Reviewer - Reviewing Activities

- Pierre Senellart, *Transactions on Database Systems, VLDB Journal*

8.1.4. Invited Talks

- Pierre Senellart, keynote at Theory and Practice of Provenance (TaPP), London, United Kingdom
- Pierre Senellart, keynote at TempWeb workshop, The Web Conference, Lyon, France
- Pierre Senellart, LORIA Colloquium, Nancy, France

8.1.5. Leadership within the Scientific Community

- Serge Abiteboul is a member of the French Academy of Sciences, of the Academia Europa, and of the scientific council of the Société Informatique de France.
- Pierre Senellart is a member of the steering committee of BDA, the French scientific community on data management.

8.1.6. Scientific Expertise

- Pierre Senellart, FWO

8.1.7. Research Administration

- Olivier Cappé is a scientific deputy director of CNRS division of Information Sciences and Technologies (INS2I).
- Luc Segoufin is a member of the CNHSCT of Inria.
- Pierre Senellart is a member of the board of section 6 of the National Committee for Scientific Research.
- Pierre Senellart is deputy director of the DI ENS laboratory, joint between ENS, CNRS, and Inria.
- Pierre Senellart is a member of the board of the DIM RFSI (Réseau Francilien en Sciences Informatiques).
- Pierre Senellart is a member of the scientific council of PGM0 (Programme Gaspard Monge).

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence: Pierre Senellart, *Databases*, 32 heqTD, L3, École normale supérieure

Licence: Pierre Senellart, *Algorithms*, 18 heqTD, L3, École normale supérieure

Licence: Michaël Thomazo, *Formal languages*, 22 heqTD, L3, Télécom ParisTech

Master: Serge Abiteboul & Pierre Senellart, *Web data management*, 36 heqTD, M2, MPRI

Pierre Senellart has various teaching responsibilities (L3 internships, M2 administration, tutoring, entrance competition) at ENS.

8.2.2. Supervision

PhD: Miyoung Han, *Reinforcement learning approaches in dynamic environments*, Télécom Paris-Tech, 19 July 2018, Pierre Senellart

PhD: Alexandre Vigny, *Query enumeration and nowhere dense graphs*, Université Paris-Diderot, 27 September 2018, Arnaud Durand & Luc Segoufin

PhD: Mikaël Monet, *Combined complexity of probabilistic query evaluation*, Université Paris-Saclay, 12 October 2018, Antoine Amarilli & Pierre Senellart

PhD: Quentin Lobbé, *Archives, fragments Web et diasporas. Pour une exploration désagrégée de corpus d'archives Web liées aux représentations en ligne des diasporas*. Université Paris-Saclay, 9 November 2018, Dana Diminescu & Pierre Senellart

PhD in progress: Julien Grange, *Graph properties: order and arithmetic in predicate logics*, started in September 2017, Luc Segoufin

PhD in progress: Karima Rafes, *Le Linked Data à l'université : la plateforme LinkedWiki*, defense planned in January 2019, Serge Abiteboul & Sarah Cohen-Boulakia

PhD in progress: Yann Ramusat, *Provenance-based routing in probabilistic graphs*, started in September 2018, Silviu Maniu & Pierre Senellart

PhD in progress: Yoan Russac, *Sequential methods for robust decision making*, started in December 2018, Olivier Cappé

8.2.3. Juries

- PhD Frederik Harwarth, June 2018, Humboldt University, Luc Segoufin (reviewer)
- PhD Debabrota Basu, October 2018, National University of Singapore, Olivier Cappé (reviewer)
- PhD Govind, December 2018, Université Caen–Normandie, Pierre Senellart (president)
- PhD Ngurah Agus Sanjaya Er, December 2018, Télécom ParisTech, Pierre Senellart (president)

8.3. Popularization

8.3.1. Internal or external Inria responsibilities

Serge Abiteboul is the president of the strategic committee of the Blaise Pascal foundation for scientific mediation.

8.3.2. Articles and contents

Serge Abiteboul published *Le bot qui murmurait à l'oreille de la vieille dame* at the *Le Pommier* éditions, a collection of short stories on the digital world, accompanied with scientific and technical discussions.

Serge Abiteboul writes regular columns on popularization of computer science in *La Recherche* and *Le Monde* (Économie).

8.3.3. Education

Pierre Senellart participated to a week-long meeting of teachers in *classes préparatoires* in Lumini in May 2018 to discuss the future of computer science education and to give an introduction to database research.

WIMMICS Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

Elena Cabrio was:

- Co-chair of CLiC-it: Fifth Italian Conference on Computational Linguistics, Turin, December.
- Challenge co-chair of The Web Conference (WWW), Lyon, France, April 23-27.

Catherine Faron Zucker was Program Chair together with Chiara Gandini of the 21st International Conference on Knowledge Engineering (EKAW 2018), November, Nancy.

Fabien Gandon was general co-chair of The Web Conference in Lyon, April, 2018.

Serena Villata was:

- Program Chair together with Eduardo Ferme of the 17th edition of the International Workshop on Non-Monotonic Reasoning (NMR), Tempe (Arizona), October,
- Chair together with Filip Radlinski of the “Poster and Demo” session of the Web Conference (WWW), Lyon, France, April,
- Chair together with Harko Verhagen, Mehdi Dastani and Jurgen Dix of the Dagstuhl Seminar on Normative Multi-Agent Systems NorMAS, April [67]

10.1.1.2. Member of the Organizing Committees

Michel Buffa organized the *WebAudio Plugins* Workshop at the Web Audio conference, Berlin, September 19-21.

Fabien Gandon was co-organizer of the Joint Day Inria Ministry of Culture 22/11/2018.

Alain Giboin was member of the organization committee of HCSE.

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

Olivier Corby was co-chair of the poster and demo track at EKAW, together with Philipp Cimiano.

Isabelle Mirbel was co-chair of the Doctoral Consortium at IEEE International Conference on Research Challenges in Information Science (RCIS).

10.1.2.2. Member of the Conference Program Committees

Michel Buffa: WebAudio Conference, ISWC.

Elena Cabrio: Association for Computational Linguistics conference (ACL), EMNLP, Extended Semantic Web Conference (ESWC), International Semantic Web Conference (ISWC), AAI Conference on Artificial Intelligence.

Olivier Corby: The Web Conference 2019, IC, Digital Health, EKAW, ICCS, ISWC, QuWeDa.

Catherine Faron Zucker: The Web Conference (WWW) 2019, ICCS, ISWC, Web Science, ESWC, IJCAI, Semantics, Web Audio Conference WAC, workshop WWW Educational Knowledge Management EKM, workshop WWW Reasoning on Data RoD, EGC 2019, EIAH, IC, CNIA.

Fabien Gandon: The Web Conference (WWW), IJCAI, ISWC (Blue Sky), EGC, SemWeb.Pro.

Alain Giboin: ISWC, VOILA Workshop (at ISWC), IC.

Isabelle Mirbel: International Conference on Advanced Information Systems Engineering (CAISE).

Oscar Rodríguez Rocha: KEOD, KSE, EKAW, IJCAI, ECAI, Semantics.

Andrea Tettamanzi: AAAI-19, AAMAS, ACM (SWA Track), EGC 2019, EKAW, PPSN, TheWebConf 2019, Web Intelligence, WILF, WIVACE. He was also senior PC Member of IJCAI/ECAI and got a mention as distinguished PC Member.

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

Catherine Faron Zucker: Revue d'Intelligence Artificielle.

Isabelle Mirbel: Ingénierie des Systèmes d'Information.

10.1.3.2. Reviewer - Reviewing Activities

Elena Cabrio: Journal Argument and Computation.

Catherine Faron Zucker: The Journal of Web Science, Journal of Web Semantics (JWS), International Journal on Semantic Web and Information Systems (IJSWIS), IEEE Transactions on Computational Social Systems (TCSS), IEEE's Transactions on Learning Technologies (TLT), Multimodal Technologies and Interaction (MTI), Ingénierie des systèmes d'information (ISI).

Andrea Tettamanzi: Semantic Web Journal, IEEE Transactions on Evolutionary Computation.

Serena Villata: Journal of Logic and Computation, Argument & Computation, Artificial Intelligence.

10.1.4. Invited Talks

Michel Buffa: Presentation of the ANR WASABI project and of WebAudio technologies at the "Journée Ministère de la Culture - Inria" on 22/11 as part of the agreement between these two institutions, at the BnF.

Presentation of the WebAudio, WebMidi and WebAssembly W3C standards. Developer's Day of the TPAC conference in Lyon, October, Lyon, France.

AZKAR Project, post-mortem presentation *Remote museum visits by an intelligent mobile robot*, during Mobility session: Autonomous and Connected Vehicle and Smart Cities, RoboPACA conference, Sophia Antipolis, France.

Elena Cabrio: *Argument Mining for Machine Translation*, 13th Machine Translation Marathon, Prague, September 6th.

From Linguistics to Computation across the Mountains to the Sea, FBK PhD Day, February 2nd, Trento (Italy).

Olivier Corby: *LDScript : a Linked Data Script Language*, Inria Montpellier, March 21st.

Semantic Web of Linked Data, Inria Rennes, April 5th.

Fabien Gandon: *Web Science, Artificial Intelligence and Intelligence Augmentation*, Invited Talk at Dagstuhl Perspectives Workshop 18262 - 10 Years of Web Science: Closing The Loop, 27/06/2018.

The revolutions of the Web planet, Invited talks I3S General Assembly, Nice, 5/07/2018.

Adding Missing Links to bridge Natural and Artificial Intelligence on the Web, Invited talks at University of Queensland, Brisbane, 08/08/2018.

A Web linking all kinds of intelligence, Invited talks at « Przemiany Festival », Copernicus Science Centre, French Embassy in Warsaw, 15/09/2018.

Towards a Web linking all kinds of intelligence, Invited Talk at SophI.A Summit, 07/11/2018.

Andrea Tettamanzi: Invited talk on *Guess What You Don't Know: Towards an Evolutionary Epistemology of Ontology Learning* at the 21st International Conference on Knowledge Engineering and Knowledge Management, Nancy, France, November 14th.

Conference on *Unsupervised Learning* at Amadeus, Sophia Antipolis, March 26th.

Tutorial talk on *Uncertainty in the Semantic Web: The case of axiom scoring* at the 12th International Conference on Scalable Uncertainty Management, Milan, Italy, October 3rd.

Conference on *Unsupervised Learning* at Amadeus, Sophia Antipolis, October 19th.

Serena Villata has been invited to deliver an Early Career Spotlight Talk at the main conference in Artificial Intelligence (IJCAI), namely the 27th International Joint Conference on Artificial Intelligence ⁰, in July in Stockholm (Sweden). The topic of this invited Early Career Spotlight Talk, *Artificial Argumentation for Humans* is detailed in the related publication [62].

10.1.5. Leadership within the Scientific Community

Fabien Gandon is:

- member of IW3C2 steering committee for The Web Conference (WWW series).
- member of SWSA steering committee for the ISWC conference (as general chair of ISWC 2019).
- member of ESWC conference steering committee.
- member of Web Science Trust Network

10.1.6. Scientific Expertise

Olivier Corby was reviewer for two project submissions at Université Gaston Berger, Senegal.

Catherine Faron Zucker:

- is the scientific referent of the Inria Learning Lab,
- was reviewer for the LabCom V3 2018 of the French Agence Nationale de la Recherche (ANR),
- was reviewer for the ARC6 call for projects of Auvergne Rhône Alpes region,
- was reviewer for the RIN call for projects of Normandie region.

Alain Giboin was reviewer for the Generic Call for Projects of the French Agence Nationale de la Recherche (ANR).

10.1.7. Research Administration

Olivier Corby is member of the scientific board of Université Côte d'Azur RISE academy (Network, Information, Digital Society) and member of the Scientific and Pedagogical committee of the Digital Systems for Humans, DS4H, graduate school at UCA.

Catherine Faron Zucker:

- is General Treasurer of the French Society for Artificial Intelligence (AFIA).
- was leading the steering committee of the AFIA college on Knowledge Engineering until June 2018.
- was member of the 2018 recruitment committee for young graduate scientists (CRCN) at Inria Lille.
- is member of the permanent commission of human resources (CPRH) of Université Nice Sophia Antipolis, section CNU 27

Fabien Gandon is:

- Vice-head of science for Inria Sophia Antipolis - Méditerranée (Délégué Scientifique Adjoint, DSA)
- Advisory Committee representative of Inria at the World-Wide Web Consortium (W3C)
- Director of the joint research Laboratory Qwant-Inria
- Representative of Inria in the Web Science Trust Network
- Leader of the research convention with the French Ministry of Culture-Inria

⁰<https://www.ijcai-18.org/early-career-talks/>

Alain Giboin:

- was member of the scientific committee of the IDEX Jedi Academy 5 "Homme, Idées et Milieux".
- was co-facilitator of the IDEX Jedi Academy 5 initiative "Humanités numériques" (with Arnaud Zucker, CEPAM).
- is member of the scientific committee of MSHS Axis 2 "TIC, Usages et Communautés".
- is co-facilitator of the initiative "Artefacts et Coordination" of MSHS Axis 2.
- served as scientific correspondent for Inria Sophia Antipolis of COERLE (Inria Comité Opérationnel d'Evaluation des Risques Légaux et Ethiques), in tandem with the legal correspondent Nadège Camelio-Laurent.

Isabelle Mirbel was Vice-dean of the Science Faculty at University Nice-Sophia Antipolis until July 2018.

"Les lundis de l'ergonomie" is a cycle of seminars on Human Computer Interaction (HCI) and UX Design. Organized by Emilie Palagi and Louise Chaussade, this multidisciplinary series of talks attract academic and professional profiles but also anyone interested in social science's approach to digital matters. This year, presentations took place with Naji Bouchiba, Guillene Ribière, Alessandro Trezzi, Manuel Boutet, Marc Relieu. The slides and some video records are available online ⁰.

10.1.8. Editorial Activities

Catherine Faron Zucker is among the scientific editors of the proceedings of the 21st International Conference on Knowledge Engineering and Knowledge Management, Nov 2018, Nancy, France. Lecture Notes in Computer Science 11313, Springer [65].

Serena Villata is among the authors of two editorial activities:

- Qingliang Chen, Paolo Torroni, Serena Villata: Preface. *Fundam. Inform.* 158(1-3): v-vii [13],
- Ugo Pagallo, Monica Palmirani, Pompeu Casanovas, Giovanni Sartor, Serena Villata: AI Approaches to the Complexity of Legal Systems - AICOL International Workshops 2015-2017: AICOL-VI@JURIX 2015, AICOL-VII@EKAW 2016, AICOL-VIII@JURIX 2016, AICOL-IX@ICAIL 2017, and AICOL-X@JURIX 2017, Revised Selected Papers. *Lecture Notes in Computer Science* 10791, Springer [66].

10.1.9. Standardization

- Michel Buffa is member of the WebAudio W3C working group and is Academic Representative of Université Côte d'Azur at W3C (AC Rep).
- Fabien Gandon is Advisory Committee representative of Inria at the World-Wide Web Consortium (W3C)

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Michel Buffa is director of MIAGE Nice-Sophia Antipolis: Licence, Master 1 and four Master 2 degrees, about 350 students ⁰.

Elena Cabrio is responsible of the internship program, 40 hours, (L3 and M2 MIAGE), University of Nice-Sophia Antipolis (UNS), France.

Catherine Faron Zucker is responsible of the Web option of the 5th year of Polytech Nice Sophia engineering school (Master degree) and is in charge of continuous training for the computer science department of Polytech Nice Sophia Antipolis.

⁰<https://lundisergo.hypotheses.org/>

⁰<http://miage.unice.fr>

Andrea Tettamanzi has managed the 3rd year of the *Licence* (Bachelor of Science) in Business Informatics (MIAGE) at the UFR Science of the University of Nice-Sophia Antipolis (UNS),

Licence: Elena Cabrio, Web Server Programming, 45 hours, (L1 INFO), UNS, France.

Licence: Elena Cabrio, Introduction to the Web, 40 hours, (L2MASS), UNS, France.

Licence: Michel Buffa, JavaScript: L3 Miage (40h)

Licence: Elena Cabrio, Internship supervision, 18 hours, (L3MIAGE), UNS, France.

Licence: Isabelle Mirbel, Web programming (Persistency), 36h, L3, UNS, France.

Licence: Andrea Tettamanzi, Algorithmics – Object Oriented Programming – Python, 50 h, L2, UNS, France.

Licence: Andrea Tettamanzi, Advanced client side Web Programming, 39 h, L2, UNS, France.

Licence: Andrea Tettamanzi, Web, 30 h, L3, UNS, France.

Master: Elena Cabrio, WebScience, 10 hours, (M2IFI), UNS, France.

Master: Elena Cabrio, Computational Linguistics, 30 hours, (Lettres), UNS, France.

Master: Elena Cabrio, Natural Language Processing for AI, 24 hours, (M1 INFO), UNS, France.

Master: Olivier Corby, Catherine Faron Zucker, Oscar Rodríguez Rocha, Semantic Web of Data, 65h, M2, UNS, France.

Master: Olivier Corby, Semantic Web, 3H, M2, University of Montpellier, France.

Master: Catherine Faron Zucker, Oscar Rodríguez Rocha, Andrea Tettamanzi, Knowledge Engineering, 35h, M2, UNS, France.

Master: Catherine Faron Zucker, Oscar Rodríguez Rocha, Web Languages, 35h, M1, UNS, France.

Master: Fabien Gandon, Web Science, 3 h, M1, UNS, France.

Master: Fabien Gandon, Integrating Semantic Web technologies in Data Science developments, 2*28 h, M2, DSTI, France.

Master/PhD: Semantic Web and Linked Data Graphs, 3 h, Winter School on Complex Networks 2018 (5th edition), France.

Master: Alain Giboin, Human-Computer-Interaction Design and Evaluation, 21h, M2, UNS.

Master: Alain Giboin, Human-Computer-Interaction Adaptation of User Interfaces, 4h, M2, UNS.

Master: Alain Giboin, Task and Activity Analysis for HCI design and evaluation, 6h, M2 Sociology and Ergonomics of Digital Technologies, UNS.

Master: Alain Giboin, HCI Design and Evaluation, 10h, M2 Sociology and Ergonomics of Digital Technologies, UNS.

Master: Alain Giboin, Digital Strategy (formerly: Economics and ICT) : Ergonomics, 13h, M2 Economics and ICT, ISEM, UNS.

Master: Isabelle Mirbel, Project Management, 24h, M2, UNS, France.

Master: Isabelle Mirbel, Requirement Engineering, 36h, M1, UNS, France.

Master: Andrea Tettamanzi, Logic for AI, 30 h, M1, UNS, France.

Master: Andrea Tettamanzi, Parallelism, 18 h, M1, UNS, France.

Master: Andrea Tettamanzi, Web Science, 5 h, M1, UNS, France.

Master: Andrea Tettamanzi, Data analysis in distributed environment, 18 h, M2, UNS, France.

E-learning

Michel Buffa, MOOC *JavaScript Intro* EDx platform.

Michel Buffa, MOOC *HTML5 Coding Essentials and Best Practices*, Edx platform.

Michel Buffa, MOOC *HTML5 Apps and Games*, also on EDx platform.

Fabien Gandon, Catherine Faron Zucker, Olivier Corby, MOOC *Web sémantique*, FUN.

Fabien Gandon, Catherine Faron Zucker, Olivier Corby, MOOC *Web of Data*, FUN.

Fabien Gandon, Catherine Faron Zucker, Olivier Corby, MOOC *Web of Data*, Coursera⁰, to be run in 2019.

⁰<https://www.coursera.org/learn/web-data/>

10.2.2. Supervision

HdR: **Michel Buffa**, *Des wikis aux simulations d'amplificateurs de guitare à lampes, le Web plateforme universelle*, UNS, December 12th, President : Fabien Gandon.

HdR: **Serena Villata**, *Explainable, Trustable and Emphatic Artificial Intelligence: from Formal Argumentation Theory to Argumentation for Humans*, UNS, July 4th, President : Fabien Gandon.

PhD: **Duc Minh Tran**, *Learning Ontologies from Linked Open Data*, Andrea Tettamanzi, UNS and Nguyen Thanh Binh, University of Danang, July [12].

PhD: **Emilie Palagi**, *Design of a Model-based Method for Evaluating Exploratory Search Systems*, UNS, Labex UCN@Sophia, Alain Giboin, Fabien Gandon with Raphaël Troncy (Eurecom), November 23rd.

PhD in progress: **Molka Dhouib**, *Modeling of a social network of service providers and companies and recommendation of service providers by reasoning on the social network*, UNS, Catherine Faron Zucker with Andrea Tettamanzi.

PhD in progress: **Ahmed El Amine Djebri**, *Distributed Artificial Intelligence for Linked Reviewable Data Management on the Semantic Web*, UNS, Andrea Tettamanzi, Fabien Gandon.

PhD in progress: **Michael Fell**, *Natural Language Processing of Song Lyrics*, UNS, Elena Cabrio, Fabien Gandon.

PhD in progress: **Raphaël Gazzotti**, *Modeling and Classification of Descriptions to Assist Decision Making*, UNS & SynchroNext, Catherine Faron Zucker, Fabien Gandon.

PhD in progress: **Tobias Mayer**, *Argument Mining for Clinical Trials*, UNS, Johan Montagnat (CNRS, I3S), Serena Villata and Céline Poudat (UNS).

PhD in progress: **Thu Huong Nguyen**, *Mining the Semantic Web for OWL Axioms*, Andrea Tettamanzi, UNS.

PhD in progress: **Mahamadou Toure**, *Mobile Access for the Web of Data*, Fabien Gandon, Pascal Molli and Moussa Lo, UGB, UNS.

PhD in progress: **Vorakit Vorakitphan**, *Argumentation and Emotions Emotion Detection with Adaptive Sentiment Analysis*, Elena Cabrio, Serena Villata, UCA.

Tobias Mayer attended:

- Advanced Course on Data Science & Machine Learning ⁰ (Siena, July 18-24)
- 3rd Summer School on Argumentation, ⁰ (Warsaw, September 06-10)

10.2.3. Juries

Catherine Faron Zucker was reviewer of the PhD thesis of

- Joe Raad, *Identity Management in Knowledge Graphs*, Université Paris Saclay, defended on 30/11/2018;
- Valentina Beretta, *Data veracity assessment: enhancing Truth Discovery using a priori knowledge*, Ecole des Mines Télécom IMT Mines Alès, defended on 30/10/2018;
- Landy Rajaonarivo, *Approche co-évolutive humain-système pour l'exploration de bases de données*, Ecole Nationale d'Ingénieurs de Brest (ENIB), defended on 29/06/2018;
- Manel Achichi, *Linking Heterogeneous Open Data – Application to the Musical Domain*, Université de Montpellier, defended on 15/02/2018.

⁰<https://acd12018.icas.xyz/>

⁰<http://waw2018.argdiap.pl/summer-school/>

Fabien Gandon was

- Jury Member for HDR Frédérique Segond, *Transformer les Données afin d'Etancher la Soif de l'Ere de la Connaissance*, University Grenoble Alpes, defended 17/01/2018
- Opponent for PhD Valentina Ivanova, *Fostering User Involvement in Ontology Alignment and Alignment Evaluation*, Linköping University Department of Computer and Information Science Division of Database and Information Techniques, defended 26/01/2018
- President for HDR Serena Villata, *Explainable, Trustable And Emphatic Artificial Intelligence From Formal Argumentation Theory To Argumentation For Humans*, University Côte d'Azur, defended 04/07/2018
- Reviewer for PhD Jörg Waitelonis, *Linked Data Supported Information Retrieval*, Karlsruher Institut für Technologie (KIT), defended 09/07/2018
- Reviewer for PhD Thesis Silvio Cardoso, *MAISA- Maintenance of Semantic Annotations*, Université Paris-Sud, LRI, and LIST Luxembourg, defended 30/11/2018
- President for HDR Michel Buffa, *Des wikis aux simulations d'amplificateurs de guitare à lampes, le Web plateforme universelle...*, University Côte d'Azur, defended 12/12/2018
- External Reviewer for PhD Thesis Luigi Asprino, *Engineering Background Knowledge for Social Robots*, University of Bologna, report sent the 15/12/2018
- Jury member for Tenure Track position for a Researcher in the field of Knowledge-based Systems in Healthcare at Bruno Kessler Foundation (FBK), 2018

Andrea Tettamanzi was:

- Jury member of the HDR theses of Giovanni Fusco, *Ville, Complexité, Incertitude. Enjeux de connaissance pour le géographe et l'urbaniste*, Université Côte d'Azur, February 5th;
- Jury member of the HDR theses of Chan Le Duc, *Raisonnement et révision pour des ontologies en logique de description*, Université Paris 8, November 29th.
- Chairman of the Jury for the PhD thesis of Abdoul Macina, UNS, December 17th on *SPARQL Distributed Query Processing over Linked Data*.
- Reviewer for the thesis of Victor Eduardo Fuentes, *Méta alignement méta heuristique*, whose defense was not authorized by Université du Québec, Montréal.

10.3. Popularization

10.3.1. Interventions

- Michel Buffa presented the WASABI ANR project during *La fête de la Science* in *L'esprit Sorcier* TV program ⁰.

⁰<https://youtu.be/-iExdePDsPA>

ZENITH Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- P. Valduriez: general chair of the VLDB Latin America Data Science Workshop (LaDAS@VLDB 2018)
- P. Valduriez: scientific chair, First Data Science School, IMSP, Django, Bénin

10.1.1.2. Member of the Organizing Committees

- A. Joly: organizing committee of the international conference CLEF 2018 and the chair of the LifeCLEF track, Avignon, sept. 2018 (<http://clef2018.clef-initiative.eu/>)
- A. Joly: organizing committee of the Floris'tic national workshop held in Montpellier, nov. 2018 (<http://floristic.org/journeefloristic/>)
- A. Liutkus: organizer of the 2018 Signal Separation Evaluation Campaign (<https://sisec18.unmix.app/>)
- F. Masegla: finance chair of IEEE ICDE 2018 (<https://icde2018.org>)
- F. Masegla: organization committee of the Inria Science Days 2018 (<https://www.inria.fr/en/news/news-from-inria/inria-science-days-2018>)
- P. Valduriez: sponsor co-chair of IEEE ICDE 2018 (<https://icde2018.org>)
- P. Valduriez: sponsor co-chair of VLDB 2018 (<https://vldb2018.incc.br>)

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

- A. Joly: area chair of ACM Multimedia 2018 (<http://www.acmmm.org/2018>)
- E. Pacitti: PC chair of the VLDB workshop on Big Social Data and Urban Computing (BiDU@VLDB 2018)

10.1.2.2. Member of the Conference Program Committees

- ACM/SIGAPP Symposium On Applied Computing (ACM SAC) Data Mining track, 2018: F. Masegla
- IEEE International Conference on Data Mining (IEEE ICDM), 2018: F. Masegla
- International Joint Conference on Artificial Intelligence (IJCAI), "Sister Conference Best Paper Track", 2018: F. Masegla
- International Symposium on Methodologies for Intelligent Systems (ISMIS), 2018: F. Masegla
- Pacific-Asia Conference on Advances in Knowledge Discovery and Data Mining (PAKDD), 2018: F. Masegla
- European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (PKDD), 2018: F. Masegla
- IEEE Artificial Intelligence and Knowledge Engineering (IEEE AIKE), 2018: F. Masegla
- International Conference on Information Management and Big Data (SIMBig), 2018: F. Masegla
- International Conference on Data Science, Technology and Applications (DATA), 2018: F. Masegla

- International Conference on Very Large Data Bases (VLDB), 2018: R. Akbarinia
- International Workshop on Big Data Management in Cloud Systems, 2018: R. Akbarinia
- Int. Conf. on Extending DataBase Technologies (EDBT), 2019: E. Pacitti
- Int. Conf. on Multimedia Retrieval (ICMR), 2018: A. Joly
- Int. Conf. on Acoustics, Speech, and Signal Processing (ICASSP), 2018: A. Joly
- Int. Conf. on Computer Vision (CVPR), 2018: A. Joly
- Int. Conf. and Labs of the Evaluation Forum (CLEF), 2018: A. Joly
- European. Conf. on Information Retrieval (ECIR), 2019: A. Joly
- Conférence sur la Gestion de Données – Principes, Technologies et Applications (BDA 2018): F. Massegli, E. Pacitti

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- VLDB Journal: P. Valduriez.
- Journal of Transactions on Large Scale Data and Knowledge Centered Systems: R. Akbarinia.
- Distributed and Parallel Databases, Kluwer Academic Publishers: E. Pacitti, P. Valduriez.
- Book series “Data Centric Systems and Applications” (Springer): P. Valduriez.
- Multimedia Tools and Applications: A. Joly.
- Plant Methods: C. Pradal.

10.1.3.2. Reviewer - Reviewing Activities

Reviewing in international journals :

- Distributed and Parallel Databases (DAPD): R. Akbarinia, E. Pacitti, P. Valduriez
- IEEE Transactions on Knowledge and Data Engineering (TKDE): R. Akbarinia, F. Massegli
- VLDB Journal: R. Akbarinia
- ACM Transactions on Database Systems (TODS): A. Joly
- IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI): A. Joly
- Information Sciences: A. Joly
- Ecological Informatics: A. Joly
- Multimedia Tools and Applications Journal (MTAP): A. Joly
- Multimedia Systems: A. Joly
- Transactions on Information Forensics & Security: A. Joly
- International Journal of Computer Vision: A. Joly
- Transactions on Image Processing: A. Joly
- ACM Trans. on Database Systems: E. Pacitti
- Knowledge and Information Systems (KAIS): F. Massegli
- IEEE Transaction on Signal Processing (TSP): A. Liutkus
- IEEE Transactions on Audio Speech and Language Processing (TASLP): A. Liutkus
- IEEE Signal Processing Magazine: A. Liutkus
- Frontiers in Plant Science: C. Pradal

10.1.4. Invited Talks

- A. Joly: keynote talk on "Towards The Recognition of the World's Flora: When HPC Meets Deep Learning" at Digital Infrastructures 2018 on Oct. 10
- A. Joly: keynote talk on "The Recognition of the World's Flora" at Terratec 2018
- A. Liutkus: tutorial on music source separation at the International Symposium on Music Information Retrieval (ISMIR 2018).
- F. Masegla: talk on "Massively Distributed Data Analytics", IRISA (Lacodam team), April 2018
- F. Masegla: talk on "Massively Distributed Time Series Indexing and Querying", LIMOS, December 2018
- P. Valduriez: keynote talk on "Blockchain 2.0: opportunities and risks" on 29 may at Africatek 2018, Cotonou, Bénin, on 25 october at BDA 2018, Bucharest, Romania, and on 19 december at Colloquim COPPE/UF RJ, Rio de Janeiro
- C. Pradal: keynote talk on "OpenAlea : an open source project for plant modelling at different scales", August 2018, Crops in Silico Symposium, NCSA, Univ. Illinois, USA.
- C. Pradal: keynote talk on "OpenAlea : a modular platform for multiscale plant modelling", April 2018, EGU 2018, Vienna, Austria.

10.1.5. Leadership within the Scientific Community

- A. Joly: scientific manager of the LifeCLEF and Pl@ntNet research platforms
- A. Liutkus: elected member of the IEEE Technical Committee on Audio and Acoustic Signal Processing
- F. Masegla: "Chargé de mission pour la médiation scientifique Inria" and head of Inria's national network of colleagues involved in science popularization
- E. Pacitti: head of Polytech' Montpellier's Direction of Foreign Relationships
- P. Valduriez: scientific manager for the Latin America zone at Inria's Direction of Foreign Relationships (DPEI)
- P. Valduriez: President of the Steering Committee of the BDA conference

10.1.6. Scientific Expertise

- R. Akbarinia, F. Masegla: reviewer for international programs (STIC AmSud, ECOS SUD).
- R. Akbarinia: expert for the French National Research Agency (ANR).
- A. Joly: reviewer for STIC AmSud international program
- F. Masegla: scientific referent for Inria on the frame agreement with SAFRAN about "System Monitoring and Data Analytics"
- E. Pacitti: reviewer for STIC AmSud international program
- P. Valduriez: reviewer for STIC AmSud international program
- P. Valduriez: reviewer for NSERC (Canada)
- C. Pradal: reviewer for STIC AmSud international program
- C. Pradal: member of CSS EGBIP (Commissions Scientifiques Spécialisées) INRA

10.2. Teaching - Supervision - Juries**10.2.1. Teaching**

Most permanent members of Zenith teach at the Licence and Master degree levels at UM2.

Esther Pacitti:

IG3: Database design, physical organization, 54h, level L3, Polytech' Montpellier, UM2

IG4: Networks, 42h, level M1, Polytech' Montpellier, UM2

IG4: Object-relational databases, 32h, level M1, Polytech' Montpellier, UM2

IG5: Distributed systems, virtualization, 27h, level M2, Polytech' Montpellier, UM2

Industry internship committee, 50h, level M2, Polytech' Montpellier

Patrick Valduriez:

Professional: Distributed Information Systems, Big Data Architectures, 75h, level M2, Capgemini Institut

Alexis Joly:

University of Montpellier: Machine Learning, 15h, level M2

Polytech' Montpellier: Content-Based Image Retrieval, 4.5h, level M1

AgroParisTech: Convolutional Neural Networks in Ecology and Agronomy, 2h, level M1

10.2.2. Supervision

PhD & HdR:

PhD : Vitor Silva, Analysis of raw data from multiple data sources during the execution of computational simulations, started 2014, UFRJ, Brazil, June 2018. Advisors: Marta Mattoso (UFRJ), Daniel Oliveira (UFF), Patrick Valduriez

PhD : Sakina Mahboubi, Privacy Preserving Top-k Query Processing over Outsourced Data, Univ. Montpellier, Nov. 21, 2018. Advisors: Reza Akbarinia, Patrick Valduriez.

PhD : Djamel-Edine Yagoubi, Massive distribution for indexing and mining time series, Univ. Montpellier, March 12, 2018. Advisors: Reza Akbarinia, Florent Masseglia, Themis Palpanas (Univ Paris Descartes).

PhD : Mehdi Zitouni, Parallel Itemsets Mining in Massively Distributed Environments, Univ. Tunis, Dec. 5, 2018. Advisors: Reza Akbarinia, Florent Masseglia, Sadok Ben Yahia (Univ Tunis).

PhD in progress: Gaetan Heidsieck, Distributed Management of Scientific Workflows for High-Throughput Plant Phenotyping, started Oct 2017, Univ. Montpellier. Advisors: Esther Pacitti, Christophe Pradal, François Tardieu (INRA).

PhD in progress: Christophe Botella, Large-scale Species Distribution Modelling based on crowdsourced image streams, started Oct 2016, Univ. Montpellier. Advisors: Alexis Joly, François Munoz (IRD), Pascal Monestiez (INRA).

PhD in progress: Titouan Lorieul, Pro-active Crowdsourcing, started Oct 2016, Univ. Montpellier. Advisor: Alexis Joly.

PhD in progress: Khadidja Meguelati, Massively Distributed Clustering, started Oct 2016, Univ. Montpellier. Advisors: Nadine Hilgert (INRA), Florent Masseglia.

PhD in progress: Renan Souza, Massively Distributed Clustering, started 2015, UFRJ, Brazil. Advisors: Marta Mattoso (UFRJ), Daniel Oliveira (UFF), Patrick Valduriez.

PhD in progress: Mathieu Fontaine, Alpha-stable models for signal processing, started 2016, IAEM, Nancy, France. Advisors: Roland Badeau (Telecom ParisTech), Antoine Liutkus.

10.2.3. Juries

Members of the team participated to the following PhD or HDR committees:

- R. Akbarinia: Sakina Mahboubi (Univ. Montpellier, advisor), Djamel-Edine Yagoubi (Univ. Montpellier, advisor)
- A. Joly: Lee Sue Han (Univ. of Malaya)
- F. Maseglia: Yann Dauxais (Univ. Rennes), Steeve Vanel-Siyon (Univ. Clermont-Ferrand, reviewer), Marc Plantevit (HDR, Univ. Lyon, reviewer), Djamel-Edine Yagoubi (Univ. Montpellier, advisor)
- E. Pacitti: Abdoul Macine (Univ. Nice, reviewer)
- P. Valduriez: Louis Jachiet (Univ. Grenoble), Ovidiu-Cristian Marcu (Univ. Rennes 1, reviewer), Vitor Silva (UFRJ, Rio de Janeiro, advisor), Sakina Mahboubi (Univ. Montpellier, advisor), Yania Molina Souto (LNCC, Rio de Janeiro, reviewer)

Members of the team participated to the following hiring committees:

- A. Joly: associate professor position, Univ. Toulon
- F. Maseglia: Inria ARP/SRP; full professor position, INSA, Lyon

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

F. Maseglia is "Chargé de mission auprès de la DGD-S Inria pour la médiation scientifique" (50% of his time) and heads Inria's national network of colleagues involved in science popularization (<https://www.inria.fr/recherches/mediation-scientifique/actions-de-mediation-scientifique/presentation>)

10.3.2. Articles and contents

Alexis Joly participated to the realization of a report on "Deep Learning and Agriculture" edited by the AgroTIC chair (<https://www.agrotic.org/>). He co-authored an article on data collection in citizen science projects [37].

10.3.3. Education

Teaching code is now officially in the school programs in France. Class'Code is a PIA project that aims at training the needed 300,000 teachers and professionals of education France. The project is a hybrid MOOC (both online courses and physical meetings). Florent Maseglia is co-author of the first course and scientific referent of the other courses.

Along with Class'Code, the association "La main à la pâte" has coordinated the writing of a school book on the teaching of computer science teaching, with Inria (Gilles Dowek, Pierre-Yves Oudeyer, Florent Maseglia and Didier Roy), France-IOI and the University of Lorraine. The book has been requested by and distributed to 15,000 readers in less than one month. The extension of this book for the French "Collège" has been released in 2017 with new activities and new scientific content.

F. Maseglia is giving a doctoral training at different doctoral schools in Montpellier, in order to train facilitators for helping teachers and people of the education world to better understand the "computational thinking". So far, 14 people have been trained.

P. Valduriez gave an invited talk on "Succeed in your Ph.D. Thesis: good practices and return of experience" at the Ph.D. meeting at LIRIS, Lyon, on December 11.

F. Maseglia is member of the pedagogic committee of "Edu'up", a project from France-IOI on learning code and computational thinking.

F. Maseglia gave a one day training session to school teachers in Créteil, on October 3.

Alexis Joly gave about 15 hours of professional training in the use of digital tools for environmental education (PI@ntNet, ThePlantGame and Smart'Flore).

10.3.4. Interventions

Zenith participated to the following events:

- F. Maseglia co-organized the regional Code-Week events with the local network of media-library ("réseau des médiathèques de Montpellier Méditerranée Métropole").
- F. Maseglia is member of the project selection committee for "La fête de la science" in Montpellier.
- F. Maseglia animated a stand at the "semaine de la mémoire" event organized by Genopolys (September 20&21).
- F. Maseglia participated in a class visit, at Saussan, with Charles Torossian (co-author of the "Vallani-Torossian" report) and the rectrice, about code teaching.

10.3.5. Internal action

F. Maseglia organized, and participated to, a 2 days training session on the Poppy Ergo Jr robot (June 25&26).

10.3.6. Creation of media or tools for science outreach

In the context of the Floris'tic project, A. Joly participates regularly to popularization, educational and citizen science actions in France (with schools, cities, parks, associations, etc.). The softwares developed within the project (PI@ntNet, Smart'Flore and ThePlantGame) are used in a growing number of formal educational programs and informal educational actions of individual teachers. For instance, Smart'Flore is used by the French National Education in a program for reducing early school leaving. PI@ntNet app is used in the Reunion island in an educational action called Vegetal riddle organized by the Center for cooperation at school. It is also used in a large-scale program in Czech republic and Slovakia (with a total of 100 classrooms involved in the program). An impact study of the PI@ntNet application did show that 6% of the respondents use it for educational purposes in the context of their professional activity.

F. Maseglia participated in the work group on "Jeu des 7 familles de l'informatique". This card game, to be announced officially in January 2019, provides support for education to computer science from the history point of view.

ALICE Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. Members of Organizing Committees

The team contributed to the “Journées Jeunes Chercheurs 2018”, organized by the GdR Informatique Mathématique.

9.1.2. Scientific Events Selection

9.1.2.1. Chair of Conference Program Committees

Bruno Lévy was program co-chair of Computer Graphics International 2018

9.1.2.2. Member of the Conference Program Committees

Bruno Lévy was IPC member of Eurographics 2018, SGP 2018, GMP 2018

9.1.2.3. Reviewer

Members of the team were reviewers for Eurographics, SIGGRAPH, SIGGRAPH Asia, Computer Aided Design, ISVC, Pacific Graphics, and SPM.

9.1.3. Journal

9.1.3.1. Member of Editorial Boards

- B. Lévy is a member of the editorial board of ACM Transactions on Graphics.
- B. Lévy is a member of the editorial board of Graphical Models (Elsevier)
- B. Lévy is a member of the editorial board of Computer Graphics and Applications

9.1.3.2. Reviewer - Reviewing Activities

Members of the team were reviewers for Computer Aided Design (CAD), Discrete Applied Mathematics (Elsevier), Transactions on Visualization and Computer Graphics (IEEE), and Computers & Graphics (Elsevier).

9.1.4. Invited Talks

Bruno Lévy gave an invited course at Symposium of Geometry Processing 2018 on Numerical Optimal Transport.

9.1.5. Popularization

Dmitry Sokolov participated in the Bett Show, one of the largest gatherings of the education community, and gave STEM popularization talk in front of a general public.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master : Bruno Lévy, Numerical Geometry, 12h, M2, ENSG

Licence : Dobrina Boltcheva, Infographie 3D, 30h, 3A, IUT Saint-Dié-des-Vosges

Licence : Dobrina Boltcheva, Advanced Object Oriented Programming & UML, 60h, 2A, IUT Saint-Dié-des-Vosges

Licence : Dobrina Boltcheva, Advanced algorithmics, 50h, 2A, IUT Saint-Dié-des-Vosges

Licence : Dobrina Boltcheva, Image Processing, 30h, 2A, IUT Saint-Dié-des-Vosges

Licence : Dobrina Boltcheva, UML Modeling, 20h, 1A, IUT Saint-Dié-des-Vosges

Licence : Dmitry Sokolov, C++, 40h, 2A, University of Lorraine

Licence : Dmitry Sokolov, Programming, 30h, 1A, University of Lorraine

Licence : Dmitry Sokolov, Logic, 30h, 3A, University of Lorraine

Master : Dmitry Sokolov, Logic, 22h, M1, University of Lorraine

Master : Dmitry Sokolov, 3D printing, 12h, M2, University of Lorraine

Master : Dmitry Sokolov, Numerical modeling, 12h, M2, University of Lorraine

AVIZ Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific Events Organisation

8.1.1.1. General Chair, Scientific Chair

- Jean-Daniel Fekete co-organized the Dagstuhl Seminar on **Progressive Data Analysis and Visualization** in 2018
- Jean-Daniel Fekete co-organized the Dagstuhl Seminar on **Provenance and Logging for Sense Making** in 2018
- Pierre Dragicevic co-organized the **Journée Visu 2018**.
- Tobias Isenberg co-organized for BELIV 2018.

8.1.2. Scientific Events Selection

8.1.2.1. Chair of Conference Program Committees

- Petra Isenberg was paper chair for InfoVis 2019.

8.1.2.2. Member of the Conference Program Committees

- Jean-Daniel Fekete was a member of the program committee for VIS 2018
- Jean-Daniel Fekete was a member of the best paper committee for PacificVis 2018.
- Pierre Dragicevic was a member of the program committee for VIS 2018.
- Tobias Isenberg was a member of the program committee for ACM/Eurographics Expressive 2018.
- Tobias Isenberg was a member of the program committee for IEEE VR 2018.
- Tobias Isenberg was a member of the program committee for EuroVis 2018.
- Tobias Isenberg was a member of the program committee for IVAPP 2018.
- Petra Isenberg was a member of the program committee for CHI.

8.1.2.3. Reviewer

- Jean-Daniel Fekete reviewed for CHI and PacificVis
- Pierre Dragicevic reviewed for VIS, UIST, EuroVis, alt.CHI, EICS, TEI, IHM.
- Tobias Isenberg reviewed for CHI, Expressive, InfoVis, PacificVis, SciVis, VAST, VISAP, and VR.
- Xiyao Wang reviewed for IHM, and TEI.
- Petra Isenberg reviewed for: CHI, EuroVA, EuroVis, ISS

8.1.3. Journal

8.1.3.1. Member of the Editorial Boards

- Pierre Dragicevic is member of the editorial board of the Journal of Perceptual Imaging (JPI).
- Pierre Dragicevic is member of the editorial board of the Springer Human-Computer Interaction Series (HCIS).
- Tobias Isenberg is member of the editorial board of Elsevier's Computers & Graphics journal.
- Petra Isenberg is member of the editorial board of IEEE Transactions on Visualization and Computer Graphics.
- Petra Isenberg is Associate Editor in Chief for IEEE Computer Graphics and Applications.

8.1.3.2. Reviewer - Reviewing Activities

- Jean-Daniel Fekete reviewed for TVCG
- Pierre Dragicevic reviewed for TOCHI, TVCG, JPI.
- Steve Haroz reviewed for Cognition, Journal of Experimental Psychology: General, Meta-Psychology
- Petra Isenberg reviewed for: Morgan Claypool (book proposal)

8.1.4. Invited Talks

- Jean-Daniel Fekete: Seminar EDF Lab Chatou "Progressive data analysis: a new language paradigm for scalability in exploratory data analysis", Chatou, Sep. 19, 2018
- Jean-Daniel Fekete: séminaire de recherche Medialab, « Nouvelles visualisations de réseaux pour de nouvelles formes d'explorations et d'analyses », Sciences Po Paris, April 3rd, 2018
- Jean-Daniel Fekete: Delft Data Science Seminar: Visual Data Science and its role in Computational Medicine The role of visualization in the hypothetico-deductive method, Delft University of Technology, January 6th, 2018.
- Tobias Isenberg: "Illustrative Visualization and Abstraction of Scientific Data". M3DISIM joined Inria/Ecole Polytechnique research team, Orsay, France, November 2018.
- Tobias Isenberg: "Illustrative Visualization and Abstraction of Scientific Data". GraphDeco research team, Sophia-Antipolis, France, December 2018.
- Steve Haroz: "Open Practices in Visualization Research". Panel discussion at Evaluation and Beyond - Methodological Approaches for Visualization workshop, 21 Oct 2018.
- Petra Isenberg: "Evaluation in Visualization". Keynote at the EMBL-EBI Workshop on Innovations in data visualisation for drug discovery, June 2018.
- Petra Isenberg: "Micro Visualizations for Pervasive and Mobile Data Exploration". Seminar Series Talk, Technical University of Dresden, May 2018.

8.1.5. Leadership within the Scientific Community

- Jean-Daniel Fekete is the Chair of the Steering Committee of the IEEE Information Visualization Conference.
- Jean-Daniel Fekete is member of the VIS Executive Committee.
- Jean-Daniel Fekete is a member of the Eurographics Publication Board.
- Jean-Daniel Fekete is the Chair of the EuroVis Best Phd Award.
- Tobias Isenberg has been a member of the Executive Committee of the Visualization and Computer Graphics Technical Committee of the IEEE Computer Society and served as Publications Chair.
- Tobias Isenberg is a member of the Steering Committee of Expressive (Joined Symposium on Computational Aesthetics, Sketch-Based Interfaces & Modeling, and Non-Photorealistic Animation & Rendering).
- Steve Haroz is the Open Practices chair of the IEEE Information Visualization conference.

8.1.6. Scientific Expertise

- Pierre Dragicevic reviewed for an NSERC Discovery Grant proposal.

8.1.7. Research Administration

- Pierre Dragicevic: Member of the Commission Consultative de Spécialistes de l'Université Paris-Sud (CCSU).

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

- “Visualization and Visual Analytics” taught by Jean-Daniel Fekete, Master 2 in Data Science, 32 hours, École Polytechnique, France.
- “Photorealistic Rendering” taught by Tobias Isenberg at Polytech Paris-Sud and Université Paris-Saclay, France.
- “Introduction to Computer Graphics” taught by Tobias Isenberg at Polytech Paris-Sud, France.
- “Non-Photorealistic Rendering” taught by Tobias Isenberg at the University of Granada, Spain.
- guest lecture on “Introduction to Data Visualization” taught by Tobias Isenberg at Université Côte d’Azur, Nice, France.
- guest lecture on “Illustrative Visualization” taught by Tobias Isenberg at ENSTA, France.
- “Interactive Information Visualization” taught by Petra Isenberg at Université Paris Sud.
- “Visual Analytics” taught by Petra Isenberg at CentraleSupélec.

8.2.2. Supervision

- PhD: Marc Barnabé, Multiscale reconstruction of microbial ecosystems using semi-supervised machine learning, Université Paris-Sud, 2018, Jean-Daniel Fekete, Evelyne Lutton, INRA.
- PhD in progress: Mickaël Sereno, Collaborative Data Exploration and Discussion Supported by AR, Univ. Paris-Sud; 2018, Tobias Isenberg
- PhD in progress: Xiyao Wang, Augmented Reality Environments for the Interactive Exploration of 3D Data, Univ. Paris-Sud; 2017, Tobias Isenberg
- PhD in progress: Sarkis Halladjian, Spatially Integrated Abstraction of Genetic Molecules, Univ. Paris-Sud; 2017, Tobias Isenberg
- PhD in progress: Haichao Miao, Visual Abstraction and Modeling for DNA Nanotechnology, TU Wien, Austria, 2016, Tobias Isenberg

8.2.3. Juries

- Jean-Daniel Fekete: Member of the PhD committee of Dr. Marion Dumont.
- Jean-Daniel Fekete: Member of the PhD committee of Dr. Germán Leiva.
- Jean-Daniel Fekete: Member of the HdR committee of Dr. Eric Lecolinet.
- Pierre Dragicevic: Member of the hiring committee for Concours CRCN 2018 Centre Inria Rennes Bretagne Atlantique.
- Pierre Dragicevic: PhD defense committee of Bruno Fruchard (Télécom Paris Tech).
- Pierre Dragicevic: Mid-term PhD evaluation committee of Stacy Hsueh (Université Paris-Saclay).
- Pierre Dragicevic: Reviewer for Marguerite Peron’s M2 internship.
- Petra Isenberg: Member of the PhD committee of Dr. Ulrike Kister
- Petra Isenberg: Reviewer Master Pro thesis, Ayoub Jaa, Université Paris Sud
- Petra Isenberg: Co-Supervisor Master thesis, Mathieu Louvet, Université Paris Sud
- Petra Isenberg: Co-Supervisor Master thesis, Mina Alipour, CentraleSupélec
- Petra Isenberg: Academic Tutor Master thesis: Marvin Rea

8.3. Popularization

8.3.1. Articles and contents

- [Lonni Besançon](#)’s PhD work was featured in [Le Monde’s Binaire blog](#).
- Steve Haroz was interviewed on the [Data Stories podcast](#), October 10, 2018

8.3.2. Creation of media or tools for science outreach

- Pierre Dragicevic and Yvonne Jansen: the [data physicalization wiki](#) and the [List of Physical Visualizations and Related Artefacts](#) (500 weekly visits) are continuously being updated.

EX-SITU Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. Member of the Organizing Committees

- ACM/ISMIR 2018, International Society for Music Information Retrieval Conference, Music and Technology co-chair: Wendy Mackay
- HAMAC International Research Workshop 2018, Human-Machine Collaboration in Embodied Interaction, main organiser: Baptiste Caramiaux
- UIST 2018, ACM Symposium on User Interface Software and Technology, Publicity Co-Chair: Michael Wessely
- UIST 2018, ACM Symposium on User Interface Software and Technology, Video Preview Co-Chair: Carla Griggio
- UIST 2018, ACM Symposium on User Interface Software and Technology, Doctoral Symposium jury: Wendy Mackay
- CHI 2018 workshop “Rethinking Interaction: From instrumental interaction to human-computer partnerships Toolkits”, organizers: Wendy Mackay, Michel Beaudouin-Lafon
- Interaction 2018, Program Co-Chair: Nolwenn Maudet

9.1.2. Scientific Events Selection

9.1.2.1. Chair of Conference Program Committees

- IHM 2018, Conférence Francophone d’Interaction Homme-Machine, Work-in-Progress (TeC) co-chair: Cédric Fleury

9.1.2.2. Member of the Conference Program Committees

- ACM CHI 2019, *ACM CHI Conference on Human Factors in Computing Systems*: Michel Beaudouin-Lafon, Wendy Mackay, Theophanis Tsandilas
- ACM UIST 2018, *ACM Symposium on User Interface Software and Technology*: Michel Beaudouin-Lafon, Wendy Mackay
- ACM UIST 2018 Doctoral Symposium: Wendy Mackay
- ACM UIST 2018 Best Paper Award Committee: Wendy Mackay
- ACM UIST 2018 Student Innovation Awards Committee
- IUI 2018, *ACM IUI Conference on Intelligent User Interfaces*: Wendy Mackay
- IUI 2019, *ACM IUI Conference on Intelligent User Interfaces*: Wendy Mackay
- MOCO 2018, *International Conference on Movement and Computing*: Sarah Fdili Alaoui
- 3DCVE 2018, *IEEE VR Workshop on Collaborative Virtual Environments*: Cédric Fleury
- ACM C&C 2018, *Creativity and Cognition*: Andrew Webb

9.1.2.3. Reviewer

- ACM CHI 2018-19, *ACM CHI Conference on Human Factors in Computing Systems*: Andrew Webb, Carla Griggio, Wanyu Liu, Sarah Fdili Alaoui, Cédric Fleury, Michael Wessely, Baptiste Caramiaux
- ACM UIST 2018, *ACM Symposium on User Interface Software and Technology*: Theophanis Tsandilas, Michael Wessely

- ACM DIS 2018, *ACM Conference on Designing Interactive Systems*: Nolwenn Maudet, Sarah Fdili Alaoui, Wendy Mackay
- ACM ISS 2018, *ACM International Conference on Interactive Surfaces and Spaces*: Ignacio Avelino, Philip Tchernavskij
- IEEE VR 2018-19, *Virtual Reality Conference*: Cédric Fleury
- Interaction 19: Carla Griggio, Germán Leiva
- ACM C&C 2018, *Creativity and Cognition*: Sarah Fdili Alaoui
- MOCO 2018, *Movement Computing*: Sarah Fdili Alaoui, Baptiste Caramiaux
- Mobile HCI '18 Late Breaking, *19th International Conference on Human-Computer Interaction with Mobile Devices and Services*: Germán Leiva, Philip Tchernavskij
- IHM 2018, *Conférence Francophone d'Interaction Homme-Machine*: Theophanis Tsandilas, Baptiste Caramiaux
- Salon des Refusés 2018, workshop at <PROGRAMMING> 2018, *The International Conference on the Art, Science, and Engineering of Programming*: Philip Tchernavskij

9.1.3. Journal

9.1.3.1. Member of Editorial Boards

- Editor for the Human-Computer Interaction area of the ACM Books Series (published with Morgan & Claypool Publishers): Michel Beaudouin-Lafon (2013-)
- CACM, *Communications of the ACM Web Editorial Board*, ACM: Wendy Mackay (2008-)
- ACM, *ACM New Publications Board*, ACM: Wendy Mackay (2015-)
- TOCHI, *Transactions on Computer Human Interaction*, ACM: Michel Beaudouin-Lafon (2009-), Wendy Mackay (2016-)
- PloS ONE: Baptiste Caramiaux (2018-)
- JIPS, *Journal d'Interaction Personne-Système*, AFIHM: Michel Beaudouin-Lafon (2009-)

9.1.3.2. Reviewer - Reviewing Activities

- TOCHI, *Transactions on Computer Human Interaction*, ACM: Baptiste Caramiaux
- CG&A, *Computer Graphics and Applications*, IEEE: Cédric Fleury
- *Frontiers in Robotics and AI*, Virtual Environments section: Cédric Fleury

9.1.4. Invited Talks

- Univ. of California San Diego (UCSD), *Towards Unified Principles of Interaction*, March 2018: Michel Beaudouin-Lafon
- Univ. of California San Diego (UCSD), *Human-Computer Partnerships*, March 2018: Wendy Mackay
- ETH Zürich, *Towards Unified Principles of Interaction*, 11 April 2018: Michel Beaudouin-Lafon
- Université de Zürich, *Human-Computer Partnerships*, 12 April 2018: Wendy Mackay
- Creativity Across Disciplines Symposium, Aarhus University, *Towards a Unified Theory of Interaction*, 5 April 2018: Wendy Mackay
- Workshop on Human-Computer Partnerships, ACM CHI 2018, *Human-in-the-loop? or Human-Computer Partnerships?*, May 2018: Wendy Mackay
- SIG: Transparent Statistics Guidelines, Panel Discussion, ACM CHI 2018, May 2018: Wendy Mackay
- SIFED 2018 : Symposium International Francophone sur l'Écrit et le Document, *Interactions à base d'esquisses sur papier et ordinateur*, 1 June 2018, Tours, France: Theophanis Tsandilas

- DATAIA-JST International Symposium on Data Science and AI, *AI and HCI: Towards Human-Computer Partnerships*, Paris, 11 July 2018: Michel Beaudouin-Lafon
- Science & Research Panel, *Interactive Materials with Printed Electronics*, 2018 Fab14 Paris, 13 July 2018: Micheal Wessely
- Rencontres Jeunes Chercheurs, RJIHM, *Experiment Design in HCI*, July: Wendy Mackay
- Workshop on Human-Computer Collaboration in Embodied Interaction (HAMAC), *Creating Human-Computer Partnerships*, IRCAM, Paris, 8 July 2018: Michel Beaudouin-Lafon
- Inria seminar Unithé ou Café, *Machine Learning and Teaching for Interaction Design*, 13 Septembre 2018: Baptiste Caramiaux
- Visual Computing Conference, Stuttgart, *Human-Computer Partnerships*, 8 October 2018: Wendy Mackay
- ECSS 2018, *European Computer Science Summit, Informatics Europe*, Gothenberg, 11 October 2018: Wendy Mackay
- GOTO Copenhagen, Keynote address, *Human-Computer Partnerships*, November 2018: Wendy Mackay
- Université de Poitiers, Techné Séminaire 1 *Technologie Numérique pour l'Education, Designing Interactive Systems*, 15 November 2018: Wendy Mackay
- Université de Poitiers, Techné Séminaire 2 *Technologie Numérique pour l'Education, Exploratory Experiment Design*: 15 November 2018: Wendy Mackay

9.1.5. Scientific Expertise

International

- NSERC Evaluation: Wendy Mackay, external expert (2018)
- ACM SIGCHI “Lifetime Service Award” committee member: Michel Beaudouin-Lafon

National

- Agence Nationale de la Recherche (ANR), Appel à projets jeunes chercheuses et jeunes chercheurs: Theophanis Tsandilas, reviewer
- ERC Generator program, Université de Lille: Michel Beaudouin-Lafon, external expert
- CNRS INS2I “Cellule ERC”: Michel Beaudouin-Lafon, member

9.1.6. Research Administration

Information Science and Technology (STIC) Department, Université Paris-Saclay: Michel Beauouin-Lafon (chair since June 2018), Wendy Mackay (member)

Research division, Université Paris-Saclay: Michel Beaudouin-Lafon (advisor for Digital Sciences since June 2018)

Digiteo RTRA research network, Université Paris-Saclay: Michel Beauouin-Lafon (director since June 2018)

STIC Doctoral School, Université Paris-Saclay: Michel Beaudouin-Lafon (adjunct director of pole 3 until May 2018)

CNRS INS2I, “Conseil Scientifique de l’Institut”: Michel Beaudouin-Lafon (member)

Telecom ParisTech, “Comité de la recherche”: Michel Beaudouin-Lafon (member)

Pôle Systematic, Working group on Information Systems: Michel Beaudouin-Lafon (member of steering committee)

Computer Science Department, Université Paris-Sud: Michel Beaudouin-Lafon (vice-President for research)

“Conseil de Laboratoire”, LRI: Wendy Mackay, Cédric Fleury (members)

- “Conseil Scientifique”, LRI: Michel Beaudouin-Lafon (member)
 CCSU, “Commission Consultative de Spécialistes de l’Université”, Université Paris-Sud: Michel Beaudouin-Lafon, Wendy Mackay (members)
 “Commission Locaux”, LRI: Theophanis Tsandilas (member)
 “Commission Scientifique”, Inria: Theophanis Tsandilas (member), since March 2017
 “Comité de sélection, Professeur”, Université de Bordeaux: Michel Beaudouin-Lafon (president)
 “Comité de sélection, Maître de Conférence”, Université Paris-Sud: Wendy Mackay
 “Tenure review committee”, University of California, Irvine: Wendy Mackay

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- Licence : Sarah Fdili Alaoui, *Programmation des interfaces interactives avancées*, 22.5h, L3, Univ. Paris-Sud
 International Masters: Theophanis Tsandilas, *Probabilities and Statistics*, 32h, M1, Univ. Paris-Saclay
 HCID Masters: Sarah Fdili Alaoui, *Business Development Labs*, 30h, M1, Univ. Paris-Sud
 HCID Masters: Sarah Fdili Alaoui, *Innovation & Entrepreneurship thesis*, 3h, M2, Univ. Paris-Sud
 HCID Masters: Sarah Fdili Alaoui, *Design Project*, 36h, M1 et M2, Univ. Paris-Sud
 HCID Masters: Michel Beaudouin-Lafon, Wendy Mackay, *Fundamentals of Situated Interaction*, 21 hrs, M1/M2, Univ. Paris-Sud
 Interaction & HCID Masters: Sarah Fdili Alaoui, *Stage en entreprise*, 2h, M2, Univ. Paris-Sud
 Interaction & HCID Masters: Sarah Fdili Alaoui, *Creative Design*, 27h, M1 et M2, Univ. Paris-Sud
 Interaction & HCID Masters: Sarah Fdili Alaoui, *Digital Fabrication*, 13,5h, M1 et M2, Univ. Paris-Sud
 Interaction & HCID Masters: Michel Beaudouin-Lafon, *Fundamentals of Human-Computer Interaction*, 21 hrs, M1/M2, Univ. Paris-Sud
 Interaction & HCID Masters: Michel Beaudouin-Lafon & Cédric Fleury, *Groupware and Collaborative Interaction*, 31.5 hrs, M1/M2, Univ. Paris-Sud
 Interaction & HCID Masters: Wendy Mackay, *Career Seminar* 6 hrs, M2, Univ. Paris-Sud
 Interaction & HCID Masters: Wendy Mackay, *Design of Interactive Systems*, 21 hrs, M1/M2, Univ. Paris-Sud
 Interaction & HCID Masters: Wendy Mackay, *Advanced Design of Interactive Systems*, 21 hrs, M1/M2, Univ. Paris-Sud
 Interaction & HCID Masters: Baptiste Caramiaux, *Gestural and Mobile Interaction*, 24 hrs, M1/M2, Univ. Paris-Sud
 Polytech: Sarah Fdili Alaoui, *Graphisme et Visualisation*, 18h, “Apprentis” 5th year, Univ. Paris-Sud
 Polytech: Cédric Fleury, *Projet Java-Graphique-IHM*, 24 hrs, 3st year, Univ. Paris-Sud
 Polytech: Cédric Fleury, *Interaction Homme-Machine*, 18 hrs, 3st year, Univ. Paris-Sud
 Polytech: Cédric Fleury, *Option Réalité Virtuelle*, 56 hrs, 5th year, Univ. Paris-Sud
 Polytech: Cédric Fleury, *Réalité Virtuelle et Interaction*, 48 hrs, “Apprentis” 5th year, Univ. Paris-Sud

9.2.2. Supervision

PhD students

PhD: Wanyu Liu, *Modeling the speed-accuracy trade-off of pointing tasks using the tools of information theory*, 22 November 2018. Advisors: Olivier Rioul (Institut Mines Telecom) & Michel Beaudouin-Lafon

PhD: Carla Griggio, *Interactive Human-Machine Learning*, Université Paris-Saclay, 11 December 2018. Advisor: Wendy Mackay

PhD: Germán Leiva, *Interaction-driven Software Development*, Université Paris-Saclay, 12 December 2018. Advisors: Wendy Mackay & Michel Beaudouin-Lafon

PhD: Michael Wessely, *Sketching and Physical Prototyping for Creative Fabrication Design*, Université Paris-Saclay, 13 December 2018. Advisors: Theophanis Tsandilas & Wendy Mackay

PhD: Marianela Ciolfi Felice, *Substrates and Co-adaptive Instruments for Creativity*, Université Paris-Saclay, 14 December 2018. Advisors: Wendy Mackay & Sarah Fdili Alaoui

PhD in progress: Yujiro Okuya, *Sensorimotor interface for Collaborative Virtual Environments based on heterogeneous interactive devices: application to industrial design*, October 2015. Advisors: Patrick Bourdot (LIMSI-CNRS) & Cédric Fleury

PhD in progress: Stacy (Shu-Yuan) Hsueh, *Embodied design for Human-Computer Co-creation*, November 2015. Advisors: Wendy Mackay & Sarah Fdili Alaoui

PhD in progress: Philip Tchernavskij, *Towards Unified Principles of Interaction*, October 2016. Advisor: Michel Beaudouin-Lafon

PhD in progress: Jean-Philippe Rivière, *Embodied Design for Human-Computer Partnership in Learning Contexts*, October 2017. Advisors: Wendy Mackay, Sarah Fdili Alaoui & Baptiste Caramiaux

PhD in progress: Yiran Zhang, *Telepresence for remote and heterogeneous Collaborative Virtual Environments*, October 2017. Advisors: Patrick Bourdot (LIMSI-CNRS) & Cédric Fleury

PhD in progress: Téó Sanchez, *Co-Learning in Interactive Systems*, September 2018. Advisors: Baptiste Caramiaux & Wendy Mackay

PhD in progress: Elizabeth Walton, *Inclusive Design in Embodied Interaction*, November 2018. Advisors: Baptiste Caramiaux, Sarah Fdili Alaoui & Wendy Mackay

PhD in progress: Miguel Renom, *Theoretical bases of human tool use in digital environments*, October 2018. Advisors: Michel Beaudouin-Lafon & Baptiste Caramiaux

PhD in progress: Dimitrios Christaras Papageorgiou, *Design, implementation and evaluation of a conceptual model of interactive substrates*, October 2018. Advisor: Michel Beaudouin-Lafon

PhD in progress: Han Han, *Participatory design of digital environments based on interaction substrates*, October 2018. Advisor: Michel Beaudouin-Lafon

PhD in progress: Viktor Gustafsson, *Co-adaptive Instruments fo Game Design*, October 2018. Advisor: Wendy Mackay

PhD in progress: Yi Zhang, *Generative Design using Instrumental Interaction, Substrates and Co-adaptive Systems*, October 2018. Advisor: Wendy Mackay

Masters students

Téó Sanchez, ENS, Sorbonne Université, “Gesture Interaction with Active Machine Learners”: Baptiste Caramiaux

Miguel Renom, “Transfer of tool-based skills from physical to digital tools”: Michel Beaudouin-Lafon

Dimitrios Christaras Papageorgiou, “Prototype of an environment based on information substrates and digital instruments”: Michel Beaudouin-Lafon

Tong Xue, “Analysis of information substrates and digital instruments in existing interactive software”: Michel Beaudouin-Lafon

Viktor Gustafsson, “Narrative Substrates for Interactive Video Games”: Wendy Mackay

Yi Zhang, “Situated Breakdowns in Video-Mediated Communication”: Wendy Mackay

Wuji Geng, “Interaction Museum Design”: Wendy Mackay

Krishnan Chandran, “Collocated Collaboration over Augmented Reality Models”: Theophanis Tsandilas and Cédric Fleury

9.2.3. *Juries*

PhD theses

Emaline Brulé, Télécom ParisTech (advisor: Annie Gentes): Wendy Mackay, reporter

Julien Gori, Télécom ParisTech (advisor: Olivier Rioul): Michel Beaudouin-Lafon, invited

Benjamin Bressolette, Centrale Marseille (advisor: Richard Kronland-Martinet): Michel Beaudouin-Lafon, examiner

Habilitations

- Marcos Serrano, Université de Toulouse, November 2018: Michel Beaudouin-Lafon, reviewer
- Eric Lecolinet, Télécom ParisTech, December 2018: Michel Beaudouin-Lafon, examiner

9.3. Popularization

9.3.1. *Articles and contents*

- Radio show “Les P’tits Bateaux” on France Inter public radio: Michel Beaudouin-Lafon (interviews in response to children questions on 10 June 2018, 16 September 2018, 7 October 2018)
- Panel at “*La Fabrique de la Danse*”, Centre 104, Paris, 5 Avril 2018: Baptiste Caramiaux (panel member)

9.3.2. *Interventions*

- Le Plateau des Recherches Infinies: art-science project with photographer Didier Goupy presenting the portraits of 100 researchers of Université Paris-Saclay. Fête de la Science, Gif-sur-Yvette, October 2018
- Workshop on “Rapid Prototyping with Interactive Materials”, Fab14, Toulouse, July 2018: Michael Wessely
- Workshop “*Relational Listening*”, CLOUD/Danslab, Lake Studios, Berlin, 22 July 2018: John MacCallum (co-facilitator).

GRAPHDECO Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. General Chair, Scientific Chair

G. Drettakis chairs the Eurographics (EG) working group on Rendering, and the steering committee of EG Symposium on Rendering.

9.1.2. Scientific Events Selection

9.1.2.1. Member of the Conference Program Committees

- George Drettakis participated in the program committee of Eurographics Symposium on Rendering (EGSR) 2018 and Eurographics 2018 STAR.
- Adrien Bousseau participated in the program committee of Eurographics 2018 and SIGGRAPH 2018.

9.1.3. Journal

9.1.3.1. Member of the Editorial Boards

- George Drettakis was an Associate Editor of ACM Transactions on Graphics until May 2018, and of Computational Visual Media (CVM). He also chaired the ACM TOG Editor-in-Chief (EiC) search committee, which appointed Marc Alexa as ACM TOG EiC.
- Adrien Bousseau is an Associate Editor of The Visual Computer Journal.

9.1.3.2. Reviewer - Reviewing Activities

- Yulia Gryaditskaya has been a reviewer for Eurographics.
- Tibor Stanko has been a reviewer for DGCI 2019 – International Conference on Discrete Geometry for Computer Imagery, and the Computers and Graphics journal.
- Adrien Bousseau was reviewer for SIGGRAPH Asia 2018, ACM Transactions on Graphics, ACM CHI.
- George Drettakis was reviewer for SIGGRAPH.

9.1.4. Invited Talks

- George Drettakis gave a keynote talk at Driving Simulation Conference (DSC '18) (<http://dsc2018.org/>)
- Adrien Bousseau gave an invited talk at the SophIA summit event on artificial intelligence (<http://sophia-summit.fr/>) and a keynote talk at the Skin of Things workshop on material perception and depiction (<https://theskinofthings.github.io/>).
- Tibor Stanko was invited to present his PhD work at Journées Informatique et Géométrie (JIG) 2018 in Lyon.

9.1.5. Scientific Expertise

Adrien Bousseau reviewed a grant proposal for the ANR.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence : Simon Rodriguez, theoretical computer science (L1) and software engineering (L3), 40h eq. TD, Polytech Nice-Sophia - Université Côte d'Azur (France)

Licence : Julien Philip, Introduction au Web et Application du Web, L2, 64h, Polytech Nice-Sophia - Université Côte d'Azur (France)

Master: George Drettakis and Adrien Bousseau, Introduction to Computer Graphics, M1, 20h eq. TD, Université Côte d'Azur (France)

9.2.2. Supervision

PhD : Jean-Dominique Favreau, Compact image vectorization by stochastic approaches, Université Côte d'Azur, March 15th 2018, Florent Lafarge (Titane) and Adrien Bousseau

PhD in progress : Johanna Delanoy, Data-driven sketch-based modeling, since October 2015, Adrien Bousseau

PhD in progress : Valentin Deschaintre, Data-driven material capture, since November 2016, Adrien Bousseau and George Drettakis

PhD in progress : David Jourdan, Interactive architectural design, since October 2018, Adrien Bousseau and Melina Skouras (Imagine)

PhD in progress : Julien Philip, Data-driven image-based rendering and relighting, since November 2016, George Drettakis

PhD in progress : Simon Rodriguez, Leveraging semantic information in image-based rendering, since November 2016, George Drettakis

PhD in progress : Théo Thonat, Image-based rendering of thin and stochastic structures, since November 2015, George Drettakis

9.2.3. Juries

- George Drettakis was a Ph.D. Reviewer for Fabian Langguth (TU Darmstadt), and member “comité suivi de thèse” of J-P. Bauchet.
- Adrien Bousseau was a Ph.D. Reviewer for James Hennessey (University College London) and Dorian Nogeng (Ecole Polytechnique).

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

- George Drettakis chairs the local “Jacques Morgenstern” Colloquium organizing committee.
- Adrien Bousseau is a member of “comité du centre” and “comité du suivi doctoral”.

9.3.2. Articles and contents

- Nice Matin published an article about the ERC project of George Drettakis.

9.3.3. Interventions

- Bastien Wailly gave a demo of our sketch-based modeling tool during *Fete de la Science*.
- Valentin Deschaintre presented his work to high school student and advised them on a small scientific project for *Math C2+*.

HYBRID Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Selection

10.1.1.1. Chair of Conference Program Committees

- Anatole Lécuyer was Member of the organization committee of IEEE VR 2018 (Tutorials, Best Paper Award Committee).
- Ferran Argelaguet was Member of the organization committee of IEEE VR 2018 (Workshops).
- Maud Marchal was Program Chair of IEEE Virtual Reality and 3D User Interfaces Conference Papers (IEEE VR 2018).

10.1.1.2. Member of the Conference Program Committees

- Ferran Argelaguet was Member of the conference program committee of IEEE VR 2018, IEEE ISMAR 2018 (International Symposium on Mixed and Augmented Reality) and of EuroVR 2018.
- Maud Marchal was Member of the conference program committee of Eurographics 2018, the best paper committee of "Journées Françaises de l'Informatique Graphique" 2018, and the best Phd award committee of GDR-IGRV/EGFR/AFRV.
- Jean-Marie Normand was Member of the conference program committee of IEEE VR 2018, IEEE AIVR 2018 (International Conference on Artificial Intelligence and Virtual Reality) and of AH 2018 (International Conference on Augmented Human).

10.1.1.3. Reviewer

- Ferran Argelaguet was Reviewer for IEEE VRST 2018, ACM CHI 2018, EuroHaptics 2018.
- Maud Marchal was Reviewer for Eurographics 2018, ACM Siggraph Asia 2018, ACM UIST 2018, Eurohaptics 2018, IEEE Haptic Symposium 2018, IEEE ICRA 2018, IHM 2018.
- Valérie Gouranton was Reviewer for IEEE VR 2018 Conference Track, IEEE VR 2018 Journal Track, CHI 2018.
- Guillaume Moreau was Reviewer for IEEE ISMAR 2018, ACM UIST 2018.
- Jean-Marie Normand was Reviewer for IEEE AIVR 2018, AH 2018, IEEE ISMAR 2018, IEEE VR 2018 Journal Track, IEEE VR 2018 Conference Track.

10.1.2. Journal

10.1.2.1. Member of the Editorial Boards

- Anatole Lécuyer is Associate Editor of the IEEE Transactions on Visualization and Computer Graphics, Frontiers in Virtual Environments, and Presence journals. He was also Guest Editor of IEEE Computer Graphics and Applications Special Issue on "Virtual and Augmented Reality", and Guest Editor of Frontiers in Virtual Environments Special Topics on "Brain-Computer Interfaces and VR/AR".
- Ferran Argelaguet is Review Editor of Frontiers in Virtual Environments.
- Maud Marchal is Review Editor of Frontiers in Virtual Environments.
- Jean-Marie Normand is Review Editor of Frontiers in Virtual Environments.

10.1.2.2. Reviewer - Reviewing Activities

- Ferran Argelaguet was Reviewer for IEEE Transactions on Visualization and Computer Graphics, IEEE Computer Graphics and Applications.

- Guillaume Moreau was reviewer for Computers & Graphics, IEEE Transactions on Visualization and Computer Graphics, Frontiers in Virtual Environments.
- Jean-Marie Normand was Reviewer for Computer Animation and Virtual Worlds.

10.1.3. Invited Talks

- Anatole Lécuyer was invited as Keynote Speaker at the BIOSTEC Conference (Funchal, Portugal, Jan. 2018), and as Invited Speaker at HAPTICS Workshop (IEEE VR 2018, Reutlingen, Germany, Mar. 2018) and at "Journée BioVR" (IRIT, Toulouse, France, Oct. 2018).
- Maud Marchal was invited to give a lecture at the Young Researchers' day (Journée jeunes chercheurs) of the "Journées de l'Informatique Graphique 2018 (j-FIG 2018)" (Poitiers, France, Nov. 2018).
- Guillaume Moreau was invited to Sino-French Symposium on Virtual Reality (Chengdu, China, Aug. 2018).
- Jean-Marie Normand was invited to give a lecture at the Young Researchers' day (Journée jeunes chercheurs) of the "Journées de la Réalité Virtuelle 2018 (j-RV 2018)" (Evry, France, Oct. 2018).
- Bruno Arnaldi was invited to give a lecture at the "Journée scientifique - systèmes intelligents : immersion et interaction" at Heudiasic Lab (UMR 7253) at Compiègne in December 2018.

10.1.4. Leadership within the Scientific Community

- Ronan Gagne is Member of the Selection and Validation Committee for the French cluster "Pôle Images et Réseaux", and of the Consortium 3D of TGIR HumaNum.
- Valérie Gouranton is Member of the Executive Committee of AFRV (French Association for Virtual Reality). She was also Member of the organization of a French Seminar on Archaeology with Inrap, in Rennes, June 2018.
- Maud Marchal is Member of the Executive Committee of Eurographics French Chapter.
- Guillaume Moreau is Member of the Steering Committee of IEEE ISMAR Conference.

10.1.5. Scientific Expertise

- Guillaume Moreau is Member of ANSES (National Health Agency) Working Group on the "sanitary effects of Virtual, Mixed and Augmented Reality". He is also Member of the HCERES (Higher Education and Research Evaluation Council) Committee of the SAMOVAR lab.

10.1.6. Research Administration

- Bruno Arnaldi is Deputy Director of IRISA, and co-Head of the Scientific Council of University of Rennes (ENS Rennes, ENSC Rennes, IEP Rennes, INSA Rennes, University Rennes 1, and University Rennes 2).
- Maud Marchal is Co-Head of the Master of "Research in Computer Science" (SIF) at University Rennes 1.
- Valérie Gouranton is Head of cross-cutting Axis "Art, Heritage & Culture" at IRISA Laboratory.
- Jean-Marie Normand is Head of the Minor "Virtual Reality" at ECN.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Anatole Lécuyer:

Master MNRV: "Haptic Interaction", 9h, M2, ENSAM, Laval, FR

Master SIBM: "Haptic and Brain-Computer Interfaces", 4.5h, M2, University of Rennes 1, FR

Master CN: "Haptic Interaction and Brain-Computer Interfaces", 9h, M1 and M2, University of Rennes 2, FR

Master SIF: "Pseudo-Haptics and Brain-Computer Interfaces", 6h, M2, University of Rennes 1, FR

Bruno Arnaldi:

Master INSA Rennes: "VRI: Virtual Reality and Multi-Sensory Interaction Course", 4h, M2, INSA Rennes, FR

Master INSA Rennes: "CG: Computer Graphics", 10h, M2, INSA Rennes, FR

Master INSA Rennes: "Virtual Reality", courses 6h, projects 16h, M1 and M2, INSA Rennes, FR

Master INSA Rennes: Projects on "Virtual Reality", 20h, M1, INSA Rennes, FR

Ferran Argelaguet:

Master STS Informatique: "Techniques d'Interaction Avancées", 26h, M2, ISTIC, University of Rennes 1, FR

Master SIF: "Virtual Reality and Multi-Sensory Interaction", 8h, M2, University of Rennes 1, FR

Master SIF: "Data Mining and Visualization", 2h, M2, University of Rennes 1, FR

Maud Marchal:

Master of Research in Computer Science: "Haptic rendering and physically-based simulation", 4h, M2, University of Rennes 1, FR

Master INSA Rennes: "Computer Graphics", 26h, M1 and responsible of this lecture, INSA Rennes, FR

Valérie Gouranton:

Licence: "Introduction to Virtual Reality", 22h, L2 and responsible of this lecture, INSA Rennes, FR

Licence: Project on "Virtual Reality", 16h, L3 and responsible of this lecture, INSA Rennes, FR

Ronan Gagne:

INSA Rennes: Projects on "Virtual Reality", 41h, L3/M1/M2, Insa Rennes, FR

Master Digital Creation: "Virtual Reality", 9h, M1, University of Rennes 2, FR

Guillaume Moreau:

Dean of studies, Ecole Centrale de Nantes, FR

Virtual Reality Major, "C++ Programming for VR", 30h, M1/M2, Ecole Centrale de Nantes, FR

Virtual Reality Major, "Fundamentals of Virtual Reality", 6h, M1/M2, Ecole Centrale de Nantes, FR

Virtual Reality Major, "Computer Graphics", 4h, M1/M2, Ecole Centrale de Nantes, FR

Virtual Reality Major, "Advanced Software Development", 20h, M1/M2, Ecole Centrale de Nantes, FR

Computer Science Major, "Discrete Mathematics", 10h, M1/M2, Ecole Centrale de Nantes, FR

Jean-Marie Normand:

Virtual Reality Major, "Computer Graphics", 24h, M1/M2, Ecole Centrale de Nantes, FR

Virtual Reality Major, "Fundamentals of Virtual Reality", 14h, M1/M2, Ecole Centrale de Nantes, FR

Virtual Reality Major, "Computer Vision and Augmented Reality", 24h, M1/M2, Ecole Centrale de Nantes, FR

Virtual Reality Major, "Advanced Concepts", 24h, M1/M2, Ecole Centrale de Nantes, FR

Virtual Reality Major, "Projects on Virtual Reality", 20h, M1/M2, Ecole Centrale de Nantes, FR

10.2.2. Supervision

10.2.2.1. PhD (defended)

- Gwendal Le Moulec, "Model-driven Virtual Reality applications synthesis", Defended in September 2018, Supervised by Valérie Gouranton, Bruno Arnaldi and Arnaud Blouin (Diverse, Inria)
- Guillaume Cortes, "Contribution to the study of projection-based systems for industrial applications in mixed reality", Defended in October 2018, Supervised by Anatole Lécuyer and Eric Marchand (Lagadic, Inria)
- Anne-Solène Dris-Kerdreux, "Concept et modèle d'intégration des IFC en tant qu'environnement virtuel interactif", Defended in October 2018, Supervised by Valérie Gouranton and Bruno Arnaldi
- Antoine Costes, "Contribution to the study of the haptic enhancement of images on touchscreens", Defended in November 2018, Supervised by Anatole Lécuyer, Philippe Guillotel (Technicolor), Fabien Danieau (Technicolor) and Ferran Argelaguet

10.2.2.2. PhD (in progress)

- Hakim Si-Mohammed, "BCI and HCI", Started in October 2016, Supervised by Anatole Lécuyer, Géry Casiez (Mjolnir, Inria), Nicolas Roussel (Mjolnir, Inria) and Ferran Argelaguet
- Hadrien Gurnel, "Assistance robotisée d'insertion d'aiguille par comanipulation", Started in October 2016, Supervised by Alexandre Krupa (Rainbow, Inria) and Maud Marchal
- Rebecca Fribourg, "Perception and interaction with and via avatars", Started in September 2017, Supervised by Ferran Argelaguet, Ludovic Hoyet (Mimetic, Inria) and Anatole Lécuyer
- Guillaume Bataille, "Natural interactions with IoT using VR/AR", Started in October 2017, Supervised by Valérie Gouranton, Danielle Pelé (Orange Labs) and Bruno Arnaldi
- Xavier de Tinguy, "Haptic manipulation in virtual environments", Started in September 2017, Supervised by Maud Marchal, Claudio Pacchierotti (Rainbow, Inria) and Anatole Lécuyer
- Flavien Lécuyer, "Interactive digital introspection methods for archeology", Started in September 2017, Supervised by Valérie Gouranton, Grégor Marchand (CNRS) and Bruno Arnaldi
- Etienne Peillard, "Improving Perception and Interaction in Augmented Reality", Started in October 2017, Supervised by Guillaume Moreau, Ferran Argelaguet, Anatole Lécuyer and Jean-Marie Normand
- Antonin Bernardin, "Interactive physically-based simulation of dexterous manipulation for robot understanding", Started in September 2017, Supervised by Maud Marchal and Christian Duriez (Defrost, Inria)
- Romain Lagneau, "Data-driven models for dexterous manipulation of robots", Started in Septembre 2017, Supervised by Maud Marchal and Alexandre Krupa (Rainbow, Inria)
- Romain Terrier, "Presence of self and others in a collaborative virtual environment", Started in October 2017, Supervised by Valérie Gouranton, Thomas Boggini (b<>com) and Bruno Arnaldi
- Mathis Fleury, "Neurofeedback based on fMRI and EEG", Started in November 2017, Supervised by Anatole Lécuyer and Christian Barillot (Visages, Inria)
- Tiffany Luong, "Affective VR: acquisition, modelling, and exploitation of affective states in virtual reality", Started in February 2018, Supervised by Anatole Lécuyer, Marc Diverrez (b<>com), Ferran Argelaguet
- Hugo Brument, "Towards user-adapted interaction techniques based on human locomotion laws for navigating in virtual environments", Started in October 2018, Supervised by Ferran Argelaguet, Maud Marchal and Anne-Hélène Olivier (MimeTIC, Inria)
- Diane Dewez, "Avatar-Based Interaction in Virtual Reality", Started in October 2018, Supervised by Anatole Lécuyer, Ferran Argelaguet and Ludovic Hoyet (MimeTIC)
- Gerard Gallagher, "Mid-air haptics", Started in October 2018, Supervised by Maud Marchal, Anatole Lécuyer and Claudio Pacchierotti (Rainbow, Inria)

- Victor Rodrigo Mercado Garcia, "Encountered-type haptics", Started in October 2018, Supervised by Maud Marchal and Anatole Lécuyer
- Guillaume Vaillant, "Outdoor wheelchair assisted navigation: reality versus virtuality", Started in November 2018, Supervised by Valérie Gouranton and Marie Babel (Rainbow, Inria)

10.2.3. *Juries*

- Anatole Lécuyer was president of the PhD committee for Pierre Bourdin (Univ. Barcelona, Spain). He was also external reviewer for the HDR of Antonio Capobianco (Univ. Strasbourg).
- Maud Marchal was an external reviewer for the PhD defenses of Karolina Golec (Univ. Lyon 1), Farzan Kalantari (Univ. Lille 1), Michael Traoré (Univ. Toulouse), Gaelle Fiard (Univ. Grenoble Alpes). She was a member of the PhD defenses of Alma Cantu (IMT Atlantique), Valentin Rousselet (Univ. Toulouse) and Firas Abi Farraj (Univ. Rennes 1).
- Guillaume Moreau was external reviewer for the PhD defense of Adrien Arnaud (LIMSI), president of the committee for Guillaume Cortes (Hybrid). He was also external reviewer for the HDR of Jean-Yves Didier (IBISC).

10.3. Popularization

As a salient action in 2018, Hybrid could organize a **press conference** on the topic of "Neurofeedback" in Paris (November 14th), which ended up with numerous media coverages (radio, press, etc).

10.3.1. *Articles and contents*

- "Autour de la question" (07/18) Radio France International: interview of Valérie Gouranton, Ronan Gaugne and Théophile Nicolas on "cultural heritage applications in VR/AR"
- "Sciences Ouest" (11/18) : interview of Anatole Lécuyer about "Neurofeedback"
- "Journal de 7h30" (11/18) France Inter radio : interview of Anatole Lécuyer about "Neurofeedback"
- "Sciences Ouest" (10/18): interview of Maud Marchal for "Epreuve par 7".

10.3.2. *Interventions*

- Technoférence du Pôle Images et Réseaux (Rennes, 02/18): co-organization by Ronan Gaugne, presentation from Maud Marchal on haptic in VR, demonstrations in Immersia.
- "Journées Science et Musique 2018" (Rennes, 10/18): co-organization of this event, and presentation of several demos of the team.
- Press Conference on "Neurofeedback" (Paris, 11/18): co-organization of this event, and presentation from Anatole Lécuyer, followed by several media coverages.

ILDA Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. General Chair, Scientific Chair

- EICS 2018, 10th ACM SIGCHI Symposium on Engineering Interactive Computing Systems: Emmanuel Pietriga (general co-chair)

9.1.1.2. Member of the Organizing Committees

- VIS 2019, the IEEE Visualization Conference (SciVis, InfoVis, VAST): Anastasia Bezerianos (Workshops co-chair)
- VIS 2018, the IEEE Visualization Conference (SciVis, InfoVis, VAST): Anastasia Bezerianos (Communities co-chair)
- EICS 2018, 10th ACM SIGCHI Symposium on Engineering Interactive Computing Systems: Caroline Appert (Doctoral Consortium co-chair)
- IHM 2018, 30ème Conférence Francophone sur l'Interaction Homme-Machine: Caroline Appert (Doctoral Consortium panel member)

9.1.2. Scientific Events Selection

9.1.2.1. Chair of Conference Program Committees

- CHI 2019, 37th ACM SIGCHI Conference on Human Factors in Computing Systems: Anastasia Bezerianos (SC - subcommittee chair)
- CHI 2018, 36th ACM SIGCHI Conference on Human Factors in Computing Systems: Emmanuel Pietriga (SC - subcommittee chair)

9.1.2.2. Member of the Conference Program Committees

- CHI 2018, 36th ACM SIGCHI Conference on Human Factors in Computing Systems: Anastasia Bezerianos
- TheWebConf (WWW) 2019, 28th Web Conference, research track Web Content Analysis, Semantics, and Knowledge: Emmanuel Pietriga
- ESWC 2019, 16th Extended Semantic Web Conference: Emmanuel Pietriga
- ISWC 2018, 17th International Semantic Web Conference: Emmanuel Pietriga
- EICS 2018, 10th ACM SIGCHI Symposium on Engineering Interactive Computing Systems: Emmanuel Pietriga
- EICS 2018 TechNote, 10th ACM SIGCHI Symposium on Engineering Interactive Computing Systems: Caroline Appert, Olivier Chapuis
- VOILA @ ISWC 2018, Visualizations and User Interfaces for Ontologies and Linked Data, workshop co-located with ISWC 2018: Emmanuel Pietriga
- TheWebConf (WWW) 2018, 27th Web Conference, research track Web Content Analysis, Semantics, and Knowledge: Emmanuel Pietriga
- IHM 2018, 30ème Conférence Francophone sur l'Interaction Homme-Machine: Caroline Appert

9.1.2.3. Reviewer

- ACM CHI 2019, Conference on Human Factors in Computing Systems: Caroline Appert, Olivier Chapuis, Emmanuel Pietriga, Hugo Romat

- ACM UIST 2018, Interface Software and Technologies Symposium: Olivier Chapuis, Caroline Appert
- ACM ISS 2018, International Conference on Interactive Surfaces and Spaces: Olivier Chapuis
- AVI 2018, Advanced Visual Interfaces: Olivier Chapuis
- IEEE VIS 2018, Visualization Conference (InfoVis): Anastasia Bezerianos
- IHM 2018, Conference of the Association Francophone d'Interaction Homme-Machine: Olivier Chapuis, Bruno Fruchard, Marie Destandau

9.1.3. Journal

9.1.3.1. Member of the Editorial Boards

- ACM ToCHI, Transactions on Computer-Human Interaction: Caroline Appert (associate editor and member of EiC search committee)

9.1.3.2. Reviewer - Reviewing Activities

- IEEE TVCG, Transactions on Visualization and Computer Graphics: Emmanuel Pietriga, Anastasia Bezerianos
- Information Visualization Journal: Emmanuel Pietriga
- Journal of Multimodal Interfaces: Caroline Appert
- Interacting with Computers: Caroline Appert

9.1.4. Invited Talks

- Olivier Chapuis: Expressive and multi-user interaction, desktops, wall displays and beyond, Dresden Talks on Interaction & Visualization, Technische Universität Dresden (Germany), May 2018.
- Caroline Appert: Low-cost Tangible Interaction with TouchTokens, Conference FAB' 14, Paris Saclay, July 2018.
- Anastasia Bezerianos: How interactive visualizations can aid us make better or at least more consistent choices, University of Calgary (Canada), Nov 2018.
- Anastasia Bezerianos: Visualization Perception at large and small scales, University of St. Andrews (UK), Dec 2018.

9.1.5. Leadership within the Scientific Community

- ANR, CES chair - Interaction, Robotique: Caroline Appert

9.1.6. Scientific Expertise

- H2020, ERC Advanced Grants (reviewer): Caroline Appert, Emmanuel Pietriga
- ANR, CES chair - Interaction, Robotique: Caroline Appert
- NSERC, Canadian Discovery Grands (reviewer): Anastasia Bezerianos

9.1.7. Research Administration

- Scientific coordinator of Inria's evaluation seminar for period 2015-2018, theme Interaction and visualization: Emmanuel Pietriga
- Deputy Director of the Laboratoire de Recherche en Informatique (LRI): Olivier Chapuis
- President of Inria Saclay - Île de France's Commission for Technological Development (CDT): Emmanuel Pietriga
- Deputy head of Pôle "Données, Connaissances, Apprentissage et Interaction" at École Doctorale Paris Saclay (ED STIC): Caroline Appert

9.1.8. Learned societies

- Association Francophone d'Interaction Homme-Machine (AFIHM), in charge of the relation with the SIF: Olivier Chapuis.
- SigCHI Paris Local Chapter, chair: Anastasia Bezerianos.
- SigCHI Paris Local Chapter, vice chair: Caroline Appert.

9.1.9. Hiring committees

- Univ. Paris-Sud hiring committee, Commission Consultative des Spécialistes de l'Université 27ème section (computer science), members: Caroline Appert, Anastasia Bezerianos.
- Assistant Professor position, Computer Science, Université Paris-Sud, 2018: Caroline Appert, Emmanuel Pietriga.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master Co-head: Anastasia Bezerianos, M2 Interaction and HCID, Univ. Paris-Saclay (until Aug 2018).

Ingénieur: Emmanuel Pietriga, Data Visualization (INF552), 36h, 3A/M1, École Polytechnique.

Ingénieur: Caroline Appert, Data Visualization (INF552), 18h, 3A/M1, École Polytechnique.

Master: Emmanuel Pietriga, Data Visualization, 24h, M2 Informatique Décisionnelle, Univ. Paris-Dauphine.

Master: Caroline Appert, Evaluation of Interactive Systems - Introduction, 21h, M2 Interaction and HCID, Univ. Paris-Saclay.

Master: Caroline Appert, Evaluation of Interactive Systems - Advanced, 21h, M2 Interaction and HCID, Univ. Paris-Saclay.

Master: Anastasia Bezerianos, Introduction to Programming of Interactive Systems, 21h, M2 Interaction and HCID, Univ. Paris-Saclay.

Master: Anastasia Bezerianos, Career Seminar, 21h, M2 Interaction and HCID, Univ. Paris-Saclay.

Master: Anastasia Bezerianos, Mixed Reality and Tangible Interaction, 11h, M2 Interaction and HCID, Univ. Paris-Saclay.

Master: Anastasia Bezerianos, Information Visualization, 10h, M2 Interaction and HCID, Univ. Paris-Saclay.

Master: Anastasia Bezerianos, HCI Project, 21h, M2 Interaction and HCID, Univ. Paris-Saclay.

Master: Anastasia Bezerianos, Design Project, 21h, M1 HCID, Univ. Paris-Saclay.

Master: Anastasia Bezerianos, Introduction aux Systèmes Interactifs, 21h, M1 Informatique, Univ. Paris-Saclay.

Master: Raphaël James, Programming of Interactive Systems, 12h, Univ. Paris-Saclay

Master: Raphaël James, Fundamentals of HCI, 21h, Univ. Paris-Saclay

Master: Tong Xue, Design of Interactive Systems, 21h, Univ. Paris-Saclay

License: Raphaël James, Algorithm/C/C++, 29h, Polytech

License: Tong Xue, Introduction à l'informatique graphique, 33h, Univ. Paris-Sud

Licence: Bruno Fruchard, Visualisation, 10h, Télécom Paristech.

Licence: Bruno Fruchard, Interaction Homme-Machine, 8h, Télécom Paristech.

Licence: Bruno Fruchard, Paradigmes de programmation, 8h, Télécom Paristech.

Licence: Bruno Fruchard, Projet d'apprentissage collaboratif thématique (student supervision), 6h, Télécom Paristech.

IUT: Marie Destandau, Programmation et administration des bases de données, 32h, Univ. Paris-Sud

IUT: Marie Destandau, Suivi de projet, 27h, Univ. Paris-Sud

IUT: Marie Destandau, Bases de données avancées, 18h, Univ. Paris-Sud

9.2.2. Supervision

PhD in progress : Eugénie Brasier, Interaction techniques for remote manipulation in multi-display environments, since October 2018, Advisors: Caroline Appert

PhD in progress : Raphaël James, Environnements de réalité physique et augmentée utilisés dans l'analyse visuelle collaborative, since October 2018, Advisors: Anastasia Bezerianos, Olivier Chapuis, Tim Dwyer

PhD in progress : Tong Xue, Interactive Visualization for Data Journalism, since October 2018, Advisors: Anastasia Bezerianos, Emmanuel Pietriga

PhD in progress : Marie Destandau, Interactive Visual Exploration of Webs of Data, since October 2017, Advisors: Caroline Appert, Emmanuel Pietriga

PhD in progress : Anna Gogolou, Iterative and expressive querying for big data series, October 2016, Advisors: Anastasia Bezerianos, Themis Palpanas

PhD in progress : Hugo Romat, Visual exploration and interactive manipulation techniques for collections of heterogeneous data and documents, since June 2016, Advisors: Caroline Appert, Emmanuel Pietriga

PhD in progress : Bruno Fruchard, Techniques d'interaction exploitant la mémoire spatiale pour faciliter l'accès rapide aux commandes et aux données, since October 2015 – December 2018, Advisors: Eric Lecolinet, Olivier Chapuis

9.2.3. Juries

PhD: Kashyap Todi, Hasselt University, Belgium: Emmanuel Pietriga (rapporteur)

PhD: Anonymous, University of Swinburne, Australia: Emmanuel Pietriga (rapporteur)

PhD: Ulrich von Zadow PhD, Technische Universität Dresden, Germany: Olivier Chapuis (reviewer)

PhD: Juliette Rambourg, Université de Toulouse, France: Caroline Appert (rapporteur)

PhD: Julien Gori, Université Paris Saclay, France: Caroline Appert (président)

PhD: Marion Dumont, Université Paris-Est, France: Caroline Appert (examineur)

PhD: Fatemeh Rajabiyazdi, University of Calgary, Canada: Anastasia Bezerianos (rapporteur)

PhD: Amira Chalbi, Université Lille 1, France: Anastasia Bezerianos (examineur)

HDR: Marcos Serrano, Université de Toulouse, France: Caroline Appert (président)

IMAGINE Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

Remi Ronfard is a member of the selection committee for Inria-MCC (Ministry of Culture and Communication) activities.

Stefanie Hahmann is a member of the Comité d'Etudes Doctorales (CED) at Inria Grenoble.

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

Stefanie Hahmann was Program Chair of Conference Shape Modeling International (SMI18) held in Lisbon 2018.

10.1.1.2. Member of the Organizing Committees

Rémi Ronfard is a member of the steering committee for the Eurographics workshop on intelligence cinematography and editing (WICED).

Rémi Ronfard was a co-organizer of the international workshop Attention machine ! Pratiques artistiques et recyclages médiatiques at Univ. Grenoble Alpes in February 2018.

Stefanie Hahmann served in the International Program Committee for the Symposium on Solid and Physical Modeling (SPM18), Bilbao 2018

Jean-Claude Léon was a member of the program committee for the SPM 2018 conference.

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

Mélina Skouras was the Poster Chair for ACM/Eurographics Symposium on Computer Animation 2018.

10.1.2.2. Member of the Conference Program Committees

Rémi Ronfard was a member of the Program Committees for Expressive 2018, International Conference on Interactive Storytelling (ICIDS) 2018, and Eurographics workshop on intelligence cinematography and editing (WICED) 2018.

Mélina Skouras was a member of the Program Committees for Eurographics 2018, Advances in Architectural Geometry 2018, Shape Modeling International 2018, and ACM/Eurographics Symposium on Computer Animation 2018.

10.1.2.3. Reviewer

Remi Ronfard was an external reviewer for Siggraph 2018 and Siggraph Asia 2018.

Jean-Claude Léon was a reviewer for the CAD 2018 conference.

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

Stefanie Hahmann is an Associate Editor of CAG (Computers and Graphics, Elsevier) and CAD (Computer Aided Design, Elsevier). She also was a guest Editor of the journal Computers and Graphics Vol. 74 (Elsevier): Special Issue on Shape Modeling International 2018,

Jean-Claude Léon is a member of the editorial board of the CAD journal.

10.1.3.2. Reviewer - Reviewing Activities

Rémi Ronfard was a reviewer for Siggraph 2018, Siggraph Asia 2018 and ACM transactions on Graphics (TOG).

Mélina Skouras was a reviewer for Siggraph Asia 2018 and ACM Transactions on Graphics.

Stefanie Hahmann was a reviewer for the journals CAD, Computers and Graphics,

10.1.4. Invited Talks

Mélina Skouras gave invited guest talks at Bellairs Workshop on Computer Animation, Fields Workshop on Robust Geometric Algorithms for Computational Fabrication, and Dagstuhl Seminar on Computational Aspects of Fabrication.

Remi Ronfard Remi Ronfard gave an invited talk on "Authoring and directing animated story worlds" at the national meeting of the GTAS (Groupe de Travail sur l'Animation et la Simulation) organized by GdR IG-RV (Informatique Géométrique et Graphique, Réalité Virtuelle et Visualisation) in Paris, July 2018.

10.1.5. Leadership within the Scientific Community

Stefanie Hahmann serves as a member of the Advisory Board (2014-2018) for the European Marie-Curie Training Network ARCADES.

Remi Ronfard and Julie Valéro (Litt & Arts, Univ. Grenoble Alpes) started a research group on Digital Dramaturgies as part of the Performance Lab, IDEX Univ. Grenoble Alpes (2018-2021). This research group is actively investigating (i) how contemporary dramaturgies represent digital worlds on stage; (ii) how contemporary dramaturgies use digital tools for writing and staging performances combining real actors with virtual actors and scenographies; and (iii) how contemporary dramaturgies can be digitally captured, indexed and analyzed for a better comprehension of the creative processes at work during pre-production and rehearsals. The research group is composed of researchers of Univ. Grenoble Alpes from multiple disciplines, i.e. literature, theatre, choreography, film studies, social sciences, geography, computer science and applied mathematics.

10.1.6. Scientific Expertise

Remi Ronfard was a member of the scientific committee of IMAGINOVE in 2018.

Remi Ronfard was a member of the scientific committee for EXPERIMENTA 2018.

10.1.7. Research Administration

Stefanie Hahmann is the head of the French working group "GTMG" (Groupe de travail en Modélisation Géométrique) part of the CNRS GDR IM and GDR IGRV.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Licence : Stefanie Hahmann, Numerical Methods, Ensimag - Grenoble INP, 240 students, 3rd year Bachelor level, 42h,

Master : Stefanie Hahmann, Geometric Modeling, Ensimag - Grenoble INP, 60 students, Master 1st year, 47h.

Master : Stefanie Hahmann, Surface Modeling, Ensimag - Grenoble INP, 30 students, Master 2nd year, 51h.

Master : Rémi Ronfard, Advanced Computer Graphics, 18 HETD, M2, Univ. Grenoble Alpes, France

Master : Rémi Ronfard, Game Engine Programming, 18 HETD, M2, Univ. Montpellier, France

Licence : Mélina Skouras, Surface modeling, 14.5 HETD, Ensimag, Grenoble, France

Doctorate : Rémi Ronfard, Spatial Media, 90 HETD, ENSAD, Paris Sciences et Lettres (PSL), France

Stefanie Hahmann is co-responsible of the department MMIS (Images and Applied Maths) at Grenoble INP with 120 students. Stefanie Hahmann was also president of the jury for over 30 Masters (PFE) thesis defences in 2018.

Jean-Claude Léon is in charge of the module Mechanical Systems at Grenoble-INP ENSE3 (300 students, 64h, coordination of three courses).

Olivier Palombi is responsible for the French **Campus numérique** of anatomy. He is responsible and national leader of the project SIDES. All the French medical schools (43) have planned to use the same e-learning framework (SIDES) to manage evaluations and to create a large shared database of questions.

10.2.2. Supervision

PhD : Romain Brégier, Détection et estimation de pose d'instances d'objet rigide pour la manipulation robotisée, Univ. Grenoble Alpes, June 11, 2018, supervised by James Crowley and Frédéric Devernay

PhD : Even Entem, Interprétation et modélisation 3D automatique à partir de dessins au trait de formes organiques, Univ. Grenoble Alpes, October 26, 2018, supervised by Marie-Paule Cani and Loic Barthes

PhD : Sandra Nabil, Evaluation de la qualité de vidéos panoramiques synthétisées, Univ. Grenoble Alpes, November 27, 2018, supervised by James Crowley and Frédéric Devernay

PhD : Guillaume Cordonnier, Modèles à couches pour simuler l'évolution de paysages à grande échelle, Univ. Grenoble Alpes, December 6, 2018, supervised by Marie-Paule Cani and Eric Galin

PhD in progress : Maxime Garcia, Animation transfer: character animation by playing and acting, since October 2016, supervised by Rémi Ronfard

PhD in progress : Youna Le Vaou, Virtual Sculpture: shape creation and modification through immersive CAVE-like systems, since March 2017, supervised by Jean-Claude Léon and Stefanie Hahmann. Funded by CIFRE contract with PSA

PhD in progress : Amélie Fondevilla, Modélisation et animation de surfaces développables, since September 2016, supervised by Stefanie Hahmann and Damien Rohmer

PhD in progress : Ameya Murukutla, Storyboarding augmented reality anatomy lessons, since Octobre 2017, supervised by Rémi Ronfard and Olivier Palombi

PhD in progress : Pierre Casati, Modeling and animation of antique statues, since October 2017, supervised by Rémi Ronfard and Stéfanie Hahmann

PhD in progress : Qianqian Fu, Computational video editing of live performances, since November 2018, supervised by Rémi Ronfard and Benjamin Lecouteux (GETALP, LIG).

PhD in progress : Thomas Buffet, Efficient multi-layered cloth animation using implicit surfaces, since December 2017, supervised by Marie-Paule Cani and Damien Rohmer.

PhD in progress : Robin Roussel, Function-aware design for objects to be fabricated, since October 2015, supervised by Niloy Mitra, Marie-Paule Cani and Jean-Claude Léon.

PhD in progress : Geoffrey Guingo, Synthesis of animated textures, since October 2015, supervised by Marie-Paule Cani, Jean-Michel Dischler and Basile Sauvage.

PhD in progress : Nachwa Aboubakr, Observation and modeling of human activities, since October 2016, supervised by James Crowley and Rémi Ronfard.

PhD in progress: David Jourdan, Support optimization for tensile membrane structures, since October 2018, supervised by Adrien Bousseau and Mélina Skouras.

PhD in progress: Mickaël Ly, Inverse elastic shell design with contact and friction with applications to garment design, since October 2017, supervised by Florence Descoubes and Mélina Skouras.

Master's thesis : David Jourdan, Optimization of support structures for tensile architecture, June 2018, supervised by Adrien Bousseau and Mélina Skouras.

Master's thesis : Rémi Colin de Verdière, Mutli-target inverse kinematics for real-time character animation, June 2018, supervised by Remi Ronfard.

Master's thesis : Sami Chibane, What makes motion beautiful?, June 2018, supervised by Rémi Ronfard.

10.2.3. Juries

Rémi Ronfard was the president of the jury for Sandra Nabil's Phd Thesis.

Rémi Ronfard was part of the selection committee for recruiting an assistant professor at Univ. Montpellier in May 2018.

Stefanie Hahmann was member of the HDR committee of Julie Digne at Univ. Lyon 1 and a reviewer of the HDR Thesis of Alexandra Bac at Univ. Aix-Marseille. She also was a reviewer of 2 PhD thesis, Univ. Claude Bernard Lyon 1 (Mathieu Giroux) and Univ. Nice (Jean-Dominique Favreau) in 2018.

Stefanie Hahmann also participated in 2018 in 2 committees for recruiting assistent professors, one at UGA, Grenoble, the other at Univ. Aix-Marseille.

10.3. Popularization

Rémi Ronfard and Julie Valéro organized a panel at Experimenta on "Virtual reality storytelling between cinema and theatre", with invited guests Christelle Derré, (collectif Or Norme), Philippe Fuchs (MINES ParisTech), Pauline Bouchet (Univ. Grenoble Alpes), Pierre-Emmanuel Le Goff (France TV) and Annick Jakobowicz (France TV).

Rémi Ronfard presented new results of the COLLODI2 project to Computer Animation professionals at MIFA in June 2018, Next-generation computer animation with RUMBA, International Animation Film Festival Annecy.

Marie-Paule Cani and Rémi Ronfard were featured in a special report on Intelligence artificielle et création artistique, Science et Avenir, aout 2018.

Rémi Ronfard and Julie Valéro published online three new video documentaries shot using our KINO AI virtual cinematography system during rehearsals of the stage adaptation of Mary Shelley's Frankenstein, written and directed by Jean-Francois Peyret.

Rémi Ronfard and Julie Valéro wrote a blog entry, L'informatique rentre en scène, Blog Binaire, Le Monde, 4 décembre 2018.

LOKI Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. Member of the Organizing Committees

- **IHM** (AFIHM): Stéphane Huot (Doctoral Consortium co-Chair), Thomas Pietrzak (Posters co-Chair)

9.1.2. Scientific Events Selection

9.1.2.1. Member of the Conference Program Committees

- **CHI** (ACM): Géry Casiez
- **IHM** (AFIHM): Thomas Pietrzak

9.1.2.2. Reviewer

- **CHI** (ACM): Sylvain Malacria, Mathieu Nancel, Thomas Pietrzak
- **UIST** (ACM): Géry Casiez, Sylvain Malacria, Mathieu Nancel, Thomas Pietrzak
- **MobileHCI** (ACM): Thomas Pietrzak
- **ISS** (ACM): Mathieu Nancel
- **NordiCHI**: Mathieu Nancel, Thomas Pietrzak
- **Eurohaptics**: Thomas Pietrzak
- **IHM** (AFIHM): Stéphane Huot, Mathieu Nancel
- **NIME**: Marcelo Wanderley
- **GI**: Mathieu Nancel

9.1.3. Journal

9.1.3.1. Member of the Editorial Boards

- **Computer Music Journal**: Marcelo Wanderley

9.1.3.2. Reviewer - Reviewing Activities

- **Transactions on Computer-Human Interaction** (ACM): Mathieu Nancel
- **Virtual Environments** (Frontiers): Géry Casiez
- **IEEE Access** (IEEE): Géry Casiez
- **Behaviour & Information Technology** (Taylor & Francis): Mathieu Nancel

9.1.4. Invited Talks

- *Human-Computer Interaction: Back to the future and... forward to the past, Insights on the FUTURE of Computing conferences*, Laboratoire d'Informatique de Grenoble, Grenoble: Stéphane Huot
- *Interaction Homme-Machine : passé composé et futur simple... ou l'inverse, Collège de France Seminar* – lecture of Gérard Berry (chair Algorithms, Machines and languages), Lille: Stéphane Huot
- *The measure and compensation of latency in touch and mouse-based systems*, DGP, Toronto, Canada: Géry Casiez
- *The measure and compensation of latency in touch and mouse-based systems*, Google, Waterloo, Canada: Géry Casiez
- *Motion Capture of Music Performances: Overview of almost 2 decades of research, RITMO International Motion Capture Workshop*, Oslo, Norway: Marcelo Wanderley (Keynote Speaker)

9.1.5. Leadership within the Scientific Community

Association Francophone d'Interaction Homme-Machine (AFIHM):

- Stéphane Huot: member of the scientific council
- Thomas Pietrzak: board member and webmaster until Oct. 2018

9.1.6. Scientific Expertise

- Agence Nationale de la Recherche: Stéphane Huot (mid-term review committee member)
- CN35 AFNOR normalization committee about normalizing the French keyboard, in collaboration with Aalto University and the Max Planck Institute: Mathieu Nancel
- FWO Research Foundation - Flanders: Géry Casiez (reviewer)
- Région Aquitaine: Géry Casiez, Sylvain Malacria (reviewer)

9.1.7. Research Administration

9.1.7.1. For Inria

- International relations working group (COST-GTRI): Stéphane Huot (member)

9.1.7.2. For Inria Lille – Nord Europe

- “Bureau du comité des équipes projets” (BCEP): Stéphane Huot (member)
- Research jobs committee (CER): Sylvain Malacria (member since Jan. 2018)
- Operational legal and ethical risk assessment committee (COERLE): Stéphane Huot (local correspondent)

9.1.7.3. For the CRISAL lab of Univ. Lille & CNRS

- Direction board: Géry Casiez (deputy director since Sept. 2018)
- Laboratory council: Géry Casiez (member until Aug. 2018)
- Computer Science PhD recruiting committee: Géry Casiez (member)

9.1.7.4. For the Université de Lille

- Coordinator for internships at IUT A: Géry Casiez
- Computer Science Department council: Thomas Pietrzak

9.1.8. Hiring committees

- Inria’s eligibility jury for Junior Researcher Positions (CRCN) in Lille: Stéphane Huot (vice-president)
- Université de Lille hiring committee for a Computer Science Assistant Professor position: Géry Casiez (president)
- Université Paris-Saclay hiring committees for Computer Science Assistant Professor positions: Géry Casiez (member), Stéphane Huot (member)

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

DUT Informatique: Géry Casiez (38h), Stéphane Huot (28h), *IHM*, 1st year, IUT A de Lille - Univ. Lille

Licence Informatique: Thomas Pietrzak, *Logique*, 52.5h, L3, Univ. Lille

Licence Informatique: Thomas Pietrzak, *Automates et Langages*, 36h, L3, Univ. Lille

Licence Informatique: Thomas Pietrzak, *Image et Interaction 2D*, 10.5h, L3, Univ. Lille

Licence Sciences pour l’Ingénieur (SPI): Sylvain Malacria, *Introduction à l’Interaction Homme Machine*, 30h, L3, Institut Villebon Georges Charpak

Cursus ingénieur: Sylvain Malacria (10h), *3DETech*, IMT Lille-Douai

Master Informatique: Thomas Pietrzak (18h), *NIHM*, M2, Univ. Lille

Master Informatique: Sylvain Malacria (20h), *NIHM*, M2, Univ. Lille

Master Informatique: Géry Casiez (4h), Thomas Pietrzak (4h), *Projets*, M2, Univ. Lille

Master Informatique: Thomas Pietrzak (34.5h), Sylvain Malacria (34.5), *IHM*, M1, Univ. Lille

Master Informatique: Mathieu Nancel, *Evaluation*, 4h, M2, Univ. Lille

Master: Thomas Pietrzak (10.5h), *3DETech : 3D Digital Entertainment Technologies*, M2, IMT Lille Douai

Doctorat: Géry Casiez, *Expériences contrôlées et analyses statistiques*, École doctorale SPI

Master & Doctorat: Marcelo Wanderley (39h), MUMT-619 Input Devices for Musical Expression

9.2.2. Supervision

PhD: Amira Chalbi, *Understanding and Designing Animations in the User Interfaces*, defended in April 2018 [11], advised by Nicolas Roussel & Fanny Chevalier

PhD in progress: Marc Baloup, *Interaction with avatars in immersive virtual environments*, started Oct. 2018, advised by Géry Casiez & Thomas Pietrzak

PhD in progress: Axel Antoine, *Helping Users with Interactive Strategies*, started Oct. 2017, advised by Géry Casiez & Sylvain Malacria

PhD in progress: Nicole Ke Chen Pong, *Understanding and Improving Users Interactive Vocabulary*, started Oct. 2016, advised by Nicolas Roussel, Sylvain Malacria & Stéphane Huot

PhD in progress: Thibault Raffailac, *Languages and System Infrastructure for Interaction*, started Oct. 2015, advised by Stéphane Huot

PhD in progress: Hakim Si Mohammed, *Improving Interaction Based on a Brain-Computer Interface*, started Oct. 2016, advised by Anatole Lecuyer, Ferran Argelaguet, Géry Casiez & Nicolas Roussel (in Rennes)

PhD in progress: Jeronimo Barbosa, *Design and Evaluation of Digital Musical Instruments*, McGill University, started in 2013, advised by Marcelo Wanderley & Stéphane Huot (in Montréal)

9.2.3. Juries

Jeff Avery (PhD, Univ. Waterloo, Canada): Géry Casiez, examiner

Antoine Costes (PhD, Univ. Bretagne Loire): Géry Casiez, reviewer

Bruno Fruchard (PhD, Univ. Paris-Saclay): Géry Casiez, reviewer

Julien Gori (PhD, Univ. Paris-Saclay): Stéphane Huot, examiner

Wanyu Liu (PhD, Univ. Paris-Saclay): Géry Casiez, reviewer

Gary Perelman (PhD, Univ. Toulouse III): Géry Casiez, reviewer

Houssein Saidi (PhD, Univ. Toulouse III): Stéphane Huot, reviewer

9.2.4. Mid-term evaluation committees

- Jeff Avery (PhD, Univ. Waterloo, Canada): Géry Casiez
- Delphine Poux (PhD, Univ. Lille): Géry Casiez
- Marc Teyssier (PhD, Univ. Paris-Saclay): Géry Casiez

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

AIRLab selection committee for the funding of **art and science projects**, Stéphane Huot (representative for Inria Lille – Nord Europe)

9.3.2. Articles and contents

2067 ou la disparition des interfaces humains-machines, interview in an **Inriality and Usbek & Rica joint article**, Stéphane Huot

Le raccourci clavier: Une meilleure interaction entre l'Homme et la machine ?, in **Lille by Inria N°7**, Sylvain Malacria

9.3.3. Education

Structuration et fonctionnement de la recherche, training session for academic librarians at **Médi-aLille**, Thomas Pietrzak

9.3.4. Internal action

Chorégraphie d'animation : structurer pour mieux comprendre, talk at Inria Lille – Nord Europe “**13:45**”, Amira Chalbi

Reliability and Perceived Reliability in Ubiquitous Gestural Input, talk at Inria Lille – Nord Europe “**30 minutes de sciences**”, Edward Lank

The TurboTouch latency compensation method, demonstration at the opening ceremony of Bâtiment Place (Inria Lille – Nord Europe), Mathieu Nancel

MANAO Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Selection

10.1.1.1. Member of the Conference Program Committees

Eurographics 2018 and 2019, Eurographics Symposium on Rendering 2018 (EGSR), Eurographics Workshop on Graphics and Cultural Heritage (GCH), Symposium on Geometry Processing 2018 (SGP), Geometric Modeling and Processing 2018 (GMP), ACM Conference on 3D Web Technology (Web3D)

10.1.1.2. Reviewer

ACM Siggraph 2018, ACM Siggraph Asia 2018, Eurographics 2019, High-Performance Graphics 2018 (HPG), ACM CHI Conference on Human Factors in Computing Systems (CHI), ACM Conference on 3D Web Technology (Web3D), Eurographics Workshop on Graphics and Cultural Heritage (GCH)

10.1.2. Journal

10.1.2.1. Reviewer - Reviewing Activities

ACM Transactions on Graphics (TOG), IEEE Transactions on Visualization and Computer Graphics (TVCG), Computer Graphics Forum (CGF), Journal of Vision (JoV), i-Perception, ACM Journal on Computing and Cultural Heritage (JOCCH), ACM Transactions on Applied Perception (TAP), Royal Society Open Science, Computer and Graphics

10.1.3. Invited Talks

Pierre Bénard – *Rendu stylisé d'animations 3D : une approche centrée utilisateur* at Rencontres Animation Développement Innovation (RADI), Angoulême, France, November 14th, 2018. Gaël Guennebaud – *A fast solver for transport maps on 2D grids* at ANR MAPA, Nancy, France, December 18th, 2018.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

The members of our team are involved in teaching computer science at University of Bordeaux, ENSEIRB Engineering School, and Institut d'Optique Graduate School (IOGS). General computer science is concerned, as well as the following graphics related topics:

Master : Pierre Bénard, Gaël Guennebaud, Romain Pacanowski, Advanced Image Synthesis, 60 HETD, M2, Univ. Bdx, France.

Master : Xavier Granier & Antoine Lucat, Numerical Techniques, 45 HETD, M1, IOGS, France

Master : Xavier Granier, Image Synthesis, 14 HETD, M2, IOGS, France

Master : Gaël Guennebaud, Geometric Modeling, 31 HETD, M2, IOGS, France

Master : Gaël Guennebaud, Parallel Programming, 9 HETD, M1, IOGS, France

Master : Romain Pacanowski, Antoine Lucat, Algorithmic and Object Programming, 60 HETD, M1, IOGS, France

Master : Xavier Granier, Romain Pacanowski, Colorimetry and Appearance Modeling, 20 HETD, M1, IOGS, France.

Master : Gaël Guennebaud and Pierre Bénard, 3D Worlds, 60 HETD, M1, Univ. Bdx and IOGS, France.

Master : Pierre Bénard, Patrick Reuter, Virtual Reality, 20 HETD, M2, Univ. Bdx, France.

Master : Patrick Reuter, Graphical user interfaces and Spatial augmented reality seminars, M2, ESTIA, France.

Master : Pierre Bénard, Image Synthesis and 3D modeling, 20 HETD, M2, ENSEIRB, France.

Licence : Patrick Reuter, Digital Imaging, 30 HETD, L3, Univ. Bdx, France.

Some members are also in charge of some fields of study:

Master : Xavier Granier, M2, IOGS (Bordeaux), France.

10.2.2. Supervision

PhD : Loïs Mignard-Debize, Plenoptic function and its application to spatial augmented reality, Inria & Univ. Bordeaux, P. Reuter & I. Ihrke, 5 February 2018

PhD : David Murray, Expressive Rendering of Volumetric Data, Thermo Fisher Scientific & Univ. Bordeaux, J. Baril & X. Granier, 10 December 2018

PhD in progress : Antoine Lucat, Appearance Acquisition and Rendering, IOGS & Univ. Bordeaux, R. Pacanowski & X. Granier

PhD in progress : Thomas Crespel, Autostereoscopic 3D display, Inria & Univ. Bordeaux, P. Reuter & X. Granier

PhD in progress : Charlotte Herzog, 3 dimensions X-rays imaging for medical applications, Imaging Optics, IOGS & Univ. Bordeaux, X. Granier

PhD in progress : Camille Brunel, Real-Time Animation and Deformation of 3D Characters, Inria & Univ. Bordeaux, P. Barla, G. Guennebaud & P. Bénard

PhD in progress : Megane Bati, Inverse Design for Complex Material Apperance, IOGS & Univ. Bordeaux, R. Pacanowski & P. Barla

10.2.3. Juries

PhD (jury member) : Even Entem, Université Grenoble Alpes, October 26th, 2018.

PhD (reviewer) : Alexandre Bleron, Université Grenoble Alpes, November 8th, 2018.

10.3. Popularization

10.3.1. Interventions

- Public exhibitions: Station Campus, Live Painting with Maud Mulliez at the Musée Ethnographique de Bordeaux (November 29th, 2018).
- Talks for schoolchildren: Camille Brunel and Pierre Bénard gave a 30 minutes talk titled *L'art et la science des films d'animation 3D* in front of secondary students during "la semaine des Maths" (March 15th, 2018), "le Printemps de la Mixité" (March 27th, 2018), and "la Fête de la Science" (October 10th, 2018).
- Talk at e-artsup: Pierre Bénard gave a 1 hour talk titled *Sciences et techniques pour l'animation 3D* in front of art students (October 8th, 2018).
- Open days at Inria Bordeaux Sud-Ouest : Demonstration of the *Wedge Camera* at "la Fête de la Science" (October 13th, 2018)

10.3.2. Internal action

- 10-year-celebration of Inria Bordeaux Sud-Ouest : Demonstration of the *Wedge Camera* (September 27th, 2018)

MAVERICK Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

- Nicolas Holzschuch is a member of the steering committee for the Eurographics Working Group on Rendering.

9.1.2. Scientific Events Selection

9.1.2.1. Member of the Conference Program Committees

- Georges-Pierre Bonneau: *Solid and Physical Modeling* 2018, *Shape Modeling International* 2018, *EnvirVis* 2018, Short paper track for *Eurographics Visualization Symposium* 2018,
- Joëlle Thollot: *Expressive* 2018.

9.1.3. Journal

9.1.3.1. Reviewer - Reviewing Activities

All members of the Maverick team work as reviewers for the most prestigious journals, including ACM TOG, IEEE TVCG, etc.

9.1.4. Research Administration

- Georges-Pierre Bonneau is member of the “conseil du Laboratoire Jean Kuntzmann”.
- Romain Vergne is member of the “conseil du Laboratoire Jean Kuntzmann”.
- Romain Vergne is co-responsible of the GT Rendu.
- Romain Vergne is co-responsible of the PhD students of the Laboratoire Jean Kuntzmann.
- Nicolas Holzschuch is an elected member of Inria Evaluation Committee (CE), an elected member of Inria Comité Technique (CTI) and a reserve member of Inria Scientific Council (CS).
- Nicolas Holzschuch is responsible for the department "Geometry and Images" of the Laboratoire Jean Kuntzmann.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Joëlle Thollot and Georges-Pierre Bonneau are both full Professor of Computer Science. Romain Vergne is an associate professor in Computer Science. They teach general computer science topics at basic and intermediate levels, and advanced courses in computer graphics and visualization at the master levels. Nicolas Holzschuch teaches advanced courses in computer graphics at the Master level.

Licence: Joëlle Thollot, Théorie des langages, 27h, L3, ENSIMAG, France

Licence: Joëlle Thollot, Séminaire d’innovation, 10h, L3, ENSE3, France

Master: Joëlle Thollot, Responsable de la filière MMIS (Modélisation mathématique, image, simulation) 24h, M1-M2, ENSIMAG, France

Master: Joëlle Thollot, Tutorat d’apprentis, 10h, M1-M2, ENSIMAG, France

Licence : Romain Vergne, Introduction to algorithms, 64h, L1, UGA, France.

Licence : Romain Vergne, WebGL, 29h, L3, IUT2 Grenoble, France.

Master : Romain Vergne, Geometric modeling, 18h, M1, UGA, France.

Master : Romain Vergne, Image synthesis, 27h, M1, UGA, France.
 Master : Romain Vergne, Image synthesis, 15h, M1, Polytech, France.
 Master : Romain Vergne, 3D graphics, 15h, M1, UGA, France.
 Master : Nicolas Holzschuch, Computer Graphics II, 18h, M2 MoSIG, France.
 Master : Nicolas Holzschuch, Synthèse d'Images et Animation, 32h, M2, ENSIMAG, France.
 Licence: Georges-Pierre Bonneau, Algorithmique et Programmation Impérative, 23h, L3, Polytech-Grenoble, France.
 Master: Georges-Pierre Bonneau, responsable de la 4^{ième} année du département INFO, 32h, M1, Polytech-Grenoble, France
 Master: Georges-Pierre Bonneau, Image Synthesis, 23h, M1, Polytech-Grenoble, France
 Master: Georges-Pierre Bonneau, Data Visualization, 40h, M2, Polytech-Grenoble, France
 Master: Georges-Pierre Bonneau, Digital Geometry, 23h, M1, UGA
 Master: Georges-Pierre Bonneau, Information Visualization, 22h, Mastere, ENSIMAG, France.
 Master: Georges-Pierre Bonneau, Scientific Visualization, M2, ENSIMAG, France.
 Master: Georges-Pierre Bonneau, Computer Graphics II, 18h, M2 MoSiG, UGA, France.

9.2.2. Supervision

PhD: Guillaume Loubet, Efficient representations for sub-pixel appearance, 25/06/2018, Fabrice Neyret
 PhD: Jérémy Wambecke, Visualisation de Données Temporelles Personnelles, 22/10/2018, Georges-Pierre Bonneau, Romain Vergne, Renaud Blanch
 PhD: Alexandre Bléron, Stylization of animated 3D scenes in a painterly style, 8/11/2018, Joëlle Thollot, Romain Vergne
 PhD in progress: Alban Fichet, Efficient representation for measured reflectance, 1/10/2015 Nicolas Holzschuch.
 PhD in progress: Vincent Tavernier, Procedural stochastic textures, 1/10/2017, Fabrice Neyret, Joëlle Thollot, Romain Vergne.
 PhD in progress: Sunrise Wang, Light transport operators simplification using neural networks, 1/9/2018, Nicolas Holzschuch
 PhD in progress: Morgane Gérardin, Connecting physical and chemical properties with material appearance, 1/10/2018, Nicolas Holzschuch
 PhD in progress: Ronak Molazem, Dimensional Analysis of Light Transport, 1/09/2018, Cyril Soler

9.2.3. Juries

Nicolas Holzschuch, member of the jury and referee, PhD of Laurent Gilles, Telecom Paristech, 12/11/2018
 Nicolas Holzschuch, member of the jury and referee, PhD of Hélène Perrier, University of Lyon, 7/3/2018
 Joëlle Thollot, member of the jury and referee, PhD of Jean-Dominique Favreau (Inria Sophia-Antipolis) 15/03/2018,
 Joëlle Thollot, member of the jury, HdR of Aurélie BUGEAU, University of Bordeaux, 30/05/2018
 Georges-Pierre Bonneau, president of the jury, PhD of Ali Jabbari, University of Grenoble, 4/07/2018
 Georges-Pierre Bonneau, member of the jury, HdR of Basile Sauvage, University of Strasbourg, 16/07/2018

Georges-Pierre Bonneau, president of the jury, PhD of Even Enthém, University of Grenoble, 26/10/2018

9.3. Popularization

Every year, “MobiNet” (see section 6.7) classes are conducted with high school pupils of the large Grenoble area to practice initiation and intuition on Computer Science, Maths and Physics. Depending on the year, we have 2 to 4 groups in the scope of INP-Grenoble “Engineering weeks”, and 0 to 2 groups in the scope of Math-C2+ operations.

Fabrice Neyret published a popularization article "Le mouvement sous toutes ses coutures" [19] in the booklet "Maths Mouvement Express 2018".

Fabrice Neyret maintains the blog [shadertoyunofficial \(https://shadertoyunofficial.wordpress.com/\)](https://shadertoyunofficial.wordpress.com/) and various shaders examples on Shadertoy site (<https://www.shadertoy.com/>) to popularize GPU technologies as well as disseminates academic models within computer graphics, computer science, applied math and physics fields.

Cyril Soler presented at FOSDEM2018 his work on privacy preserving data distribution over decentralized mesh networks (<https://www.youtube.com/watch?v=FR9SSdGN0K8>).

MFX Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

Sylvain Lefebvre co-organized the first multidisciplinary workshop on academic research in additive manufacturing within the Lorraine area, which hosted 70 participants over two days. The two days workshop started on May 31, 2018 at Inria-Nancy Grand Est and was co-organized with Sandrine Hoppe (LRGP), Samuel Kenzari (IJL) and Hakim Boudaoud (ERPI). See <https://www.inria.fr/centre/nancy/agenda/workshop-fa>.

9.1.2. Scientific Events Selection

9.1.2.1. Member of Conference Program Committees

- Samuel Hornus was on the program committee for the “short papers track” at Eurographics.
- Jonàs Martínez was on the program committee of Pacific Graphics and the “short papers track” at Eurographics.
- Sylvain Lefebvre is on the advisory board of the technical paper committee of EUROGRAPHICS 2019.

9.1.2.2. Reviewer

Jonàs Martínez and Sylvain Lefebvre were reviewers for SIGGRAPH and SIGGRAPH Asia.

9.1.3. Journal

9.1.3.1. Reviewer - Reviewing Activities

- Samuel Hornus did some reviewing for ACM Transactions on Graphics and Computer Graphics Forum.
- Jonàs Martínez was reviewer of Computer Aided Geometric Design (Elsevier) and Transactions on Visualization and Computer Graphics (IEEE).

9.1.4. Invited Talks

Jonàs Martínez gave an invited talk in Journées Scientifiques Inria 2018.

Sylvain Lefebvre gave a one hour class at the 2018 SPG Graduate School (<https://sgp2018.sciencesconf.org/resource/page/id/7>). He was keynote speaker at the WCCM workshop *Expanding the Frontiers of Engineering Design using Computation* (http://www.wccm2018.org/MS_1407). Sylvain also gave an invited talk at the JIGS (*Journées Informatique et Géométrie 2018*, June 21-22).

9.1.5. Scientific Expertise

Sylvain Lefebvre participated in a strategy meeting at ANRT on the topic of 4D printing, on November 12, 2018.

9.1.6. Research Administration

Samuel Hornus leads the local “Commission du Développement Technologique.” Sylvain Lefebvre joined the Inria center *bureau du comité des projets* (BCP) in November.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

École d'ingénieur : Samuel Hornus, Mathématiques pour l'informatique, 32 HeqTD, niveau L1, Télécom Nancy, France.

Master 1: Jonàs Martínez, Infographie, 24 HeqTD, Université de Lorraine, France.

Master 1: Jonàs Martínez, Introduction au parallélisme de données, 12 HeqTD, Université de Lorraine, France.

PhD School: Jonàs Martínez, International School on Graphics and Geometry Processing for Digital Manufacturing, 3h, Italy.

École d'ingénieur : Cédric Zanni, Informatique 1, 20h ETD, niveau L3, École des Mines de Nancy, France.

École d'ingénieur : Cédric Zanni, Informatique 2, 27.5h ETD, niveau L3, École des Mines de Nancy, France.

École d'ingénieur : Cédric Zanni, Introduction au Parcours Information et Systèmes 13.5h ETD, niveau L3, École des Mines de Nancy, France.

Master: Cédric Zanni, Software Engineering, 20h ETD, M1, École des Mines de Nancy, France.

Master: Cédric Zanni, Operating System, 12h ETD, M1, École des Mines de Nancy, France.

Master: Cédric Zanni, Introduction au C/C++, 27h ETD, M1, École des Mines de Nancy, France.

Master: Cédric Zanni, Techniques de l'animation et du jeu vidéo, 27h ETD, M1, École des Mines de Nancy, France.

Master: Sylvain Lefebvre, Programmation pour le jeu vidéo, 12h ETD, École des Mines de Nancy, France.

Master: Sylvain Lefebvre, Introduction au parallélisme et au graphisme, 9h ETD, ENSG Nancy, France.

Master: Sylvain Lefebvre, Introduction à la fabrication additive, 9h ETD, ENSEM Nancy, France.

9.2.2. Supervision

PhD in progress : Thibault Tricard, *Multi-material microstructures*, started in October 2018, co-advised by Sylvain Lefebvre and Didier Rouxel (Institut Jean Lamour).

PhD in progress : Jimmy Etienne, *Curved additive manufacturing*, started in September 2018, co-advised by Sylvain Lefebvre and Cédric Zanni.

PhD in progress : Semyon Efremov, *Stochastic procedural microstructures: 3D modeling and analysis*, started in October 2018, co-advised by Jonàs Martínez and Sylvain Lefebvre.

9.2.3. Juries

Sylvain Lefebvre was reviewer for the HdR thesis of Basile Sauvage (ICube, Strasbourg, France). He also served on the mid-PhD juries of Pascal Guehl (Icube) and Tim Kuipers (TU-Delft).

9.3. Popularization

9.3.1. Ada Lovelace Day

In the context of the Ada Lovelace Day, 9th October 2018, Noémie Vennin received about twenty young girls in our 3D printer room. The Ada Lovelace Day is an international celebration of the achievements of women in science, technology, engineering and maths (STEM). It aims to increase the profile of women in these fields and, in doing so, create new role models who will encourage more girls into STEM careers and support women already working in.



Figure 11. Ada Lovelace Day at MFX Team.

9.3.2. IceSL Event for non-academic users

The IceSL event was held on February 22, 2018 in Paris. The objective was to bring together our community as well as new users. We invited external users, industrial partners and FabLabs at large (through national mailing lists).

The program (<https://www.weezevent.com/icesl>) involved training with the software (by all the IceSL team members, 6 sessions in total), then we had our most experienced users present advanced use of IceSL: advanced modeling with implicit volumes by Loic Fejoz, modeling of orthopedic braces by Pierre Alexandre Hugron, the making-of of a complex table with our partner Creative Industry. We finally had a social event with an exhibition of our best parts.

The gathering was a success, with 50 attendees – the maximum we could host – from a variety of backgrounds (makers and industry). Following the event we saw a clear growth in the interest around the software, with a tripled visit rate to our website and a steep increase in downloads (25% additional downloads since then). The French IceSL community is especially active, with 15% of our total visits, just after the United States (23%).

We are scheduled to repeat this event (in a more compact format) in March 2019 at Station F, in Paris.

MIMETIC Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- Anne-Hélène Olivier, Workshop VHCIE 2018, IEEE VR 2018, Reutlingen, Germany, March 2018
- Anne-Hélène Olivier, Workshop "walkers behaviour: from analysis to applications", Rennes, June 2018, broadcasted as a Webinar for the International Society of Posture and Gait Research.

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

Ludovic Hoyet: Animation & Simulation Area Program Chair, International Conference on Computer Graphics Theory and Applications 2019, Prague, Czech Republic, Feb. 2019

Anne-Hélène Olivier: co-chair of the IEEE VR 2019 Conference paper track, Osaka, Japan.

10.1.2.2. Member of the Conference Program Committees

Ludovic Hoyet, ACM Motion in Games MIG 2018, Cyprus, Nov. 2018

Ludovic Hoyet, ACM Symposium on Applied Perception 2018, Vancouver, Canada, Aug. 2018

Ludovic Hoyet, ACM Siggraph Asia Courses 2018, Tokyo, Japan, Dec. 2018

Anne-Hélène Olivier, ACM Motion in Games MIG 2018, Cyprus, Nov. 2018

Anne-Hélène Olivier, Euro-VR 2018 London, UK, October 2018.

Franck Multon, ACM Motion in Games MIG 2018, Cyprus, Nov. 2018

Franck Multon, Computer Animation and Social Agents 2018, Beijing, May 2018

Marc Christie, ACM Motion in Games 2018, Cyprus, Nov. 2018

Marc Christie, ACM TVX 2018, Seoul, June. 2018

Richard Kulpa, International Conference on Computer Graphics Theory and Applications (GRAPP), 2018

10.1.2.3. Reviewer

Ludovic Hoyet, ACM Siggraph 2018, IEEE VR 2019, Artificial Intelligence and Virtual Reality

Anne-Hélène Olivier, IEEE VR 2019 TVCG Conference paper, ACM VRST 2018, IEEE International Conference on Automatic Face and Gesture Recognition

Richard Kulpa, IEEE VR, ACM CHI (Computer Human Interface), Computer & Graphics

Franck Multon, IEEE VR 2019, Pacific Graphics 2018

Marc Christie, ACM Siggraph, ACM Siggraph Asia, ACM CHI, Eurographics

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- Franck Multon, Presence, MIT Press
- Franck Multon, Computer Animation and Virtual Worlds CAVW, John Wiley
- Antonio Mucherino, Guest Editor of Optimization Letters, Springer
- Armel Crétual, Editorial board of Journal of Electromyography and Kinesiology
- Marc Christie, Associate Editor of the Visual Computer

10.1.3.2. Reviewer - Reviewing Activities

Franck Multon, Medical & Biological Engineering & Computing, Applied Ergonomics, IEEE Journal of Biomedical and Health Informatics, International Journal of Industrial and Operations Research, Human Movement Sciences

Ludovic Hoyet, IEEE Transactions on Visualization and Computer Graphics, Computers & Graphics, Computer Graphics Forum, ACM Transactions on Applied Perception

Anne-Hélène Olivier, Gait and Posture, Human Movement Science, TVCG, CAG, Transactions on Neural Systems & Rehabilitation Engineering, VIRE

Antonio Mucherino, Journal of Global Optimization, Springer, Discrete Applied Mathematics, Elsevier

Armel Crétual, ACM Transactions on Graphics, Clinical Biomechanics, IEEE Robotics and Automation Letters

Richard Kulpa, PlosOne, Journal of Sport Science, Human Movement Science, Sports Medicine, Journal of Sports Engineering and Technology, International Journal of Sports Science & Coaching,

Marc Christie, IEEE TVCG, The Visual Computer, CGF

Charles Pontonnier, Applied Ergonomics, Multibody System Dynamics

10.1.4. Invited Talks

Anne-Hélène Olivier, IFSTTAR Marne la Vallée, March 2018

Ludovic Hoyet, IFSTTAR Marne la Vallée, March 2018

Charles Pontonnier, EMC2 Institute, Matinale "Opérateur du futur", November 2018

Marc Christie, ACM TVX, Seoul, Korea, 2018

Marc Christie, Beijing Film Academy, Beijing, China, October 2018

Marc Christie, ChinaVR, Qingdao, China, October 2018

Franck Multon, Université Reims Champagne Ardennes, July 2018

Franck Multon, Université Paris Sud, July 2018

10.1.5. Scientific Expertise

Franck Multon, ANR expert, member of the ANR CPDS 4 "Santé Bien-être" through the Allistene national Alliance to design the next ANR call for projects,

Armel Crétual, ANR expert (TecSan)

10.1.6. Research Administration

Franck Multon is member of the University Rennes2 Research steering committee "commission recherche", and Academic Council "CAC"

Franck Multon is coordinator of Inria national initiative "Sport @ Inria" in relation with the French Ministry of Sports, and the French Ministry of Research, for Olympic Games 2024

Ludovic Hoyet is an elected member of the Board of Managers for the French Computer Graphics Association (Association Française d'Informatique Graphique) since Oct. 2017

Georges Dumont is president of the elected group at scientific council of École Normale Supérieure de Rennes, member of the scientific council of École Normale Supérieure de Rennes

Georges Dumont is scientific head of Immerstar platforms (Immersia + Immermove) jointly for Inria and Irisa Partners

Richard Kulpa is member of the University Rennes2 Research steering committee "commission recherche", Academic Council "CAC" and Committee of International Affairs "CAI"il "CAC",

Benoit Bideau is director of the M2S Lab

Fabrice Lamarche is an elected member of the CNU (French National Council of Universities).

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Master : Franck Multon, co-leader of the IEAP Master (1 and 2) "Ingénierie et Ergonomie de l'Activité Physique", STAPS, University Rennes2, France

Master : Franck Multon, "Santé et Performance au Travail : étude de cas", leader of the module, 30H, Master 1 M2S, University Rennes2, France

Master : Franck Multon, "Analyse Biomécanique de la Performance Motrice", leader of the module, 30H, Master 1 M2S, University Rennes2, France

Master: Charles Pontonnier, "Analytical Mechanics" , 40H (M1), École Spéciale Militaire de Saint-Cyr Coëtquidan, France

Master: Charles Pontonnier, "Design and control of legged robots", 38H (M1), École Spéciale Militaire de Saint-Cyr Coëtquidan, France

Master: Charles Pontonnier, "Simulation of multibody system dynamics", 34H (M1), École Normale Supérieure de Rennes, France

Master: Charles Pontonnier, "oral preparation to agregation competitive exam", 18H (M2), École Normale Supérieure de Rennes, France

Master : Georges Dumont, Responsible of the second year of the master Engineering of complex systems, École Normale Supérieure de Rennes and Rennes 1 University, France

Master : Georges Dumont, Mechanical simulation in Virtual reality, 36H, Master Engineering of complex systems and Mechatronics, Rennes 1 University and École Normale Supérieure de Rennes, France

Master : Georges Dumont, Mechanics of deformable systems, 40H, Master FE, École Normale Supérieure de Rennes, France

Master : Georges Dumont, oral preparation to agregation competitive exam, 20H, Master FE, École Normale Supérieure de Rennes, France

Master : Georges Dumont, Vibrations in Mechanics, 10H, Master FE, École Normale Supérieure de Rennes, France

Master : Georges Dumont, Multibody Dynamics, 9H, Master FE, École Normale Supérieure de Rennes, France

Master : Georges Dumont, Finite Element method, 12H, Master FE, École Normale Supérieure de Rennes, France

Master : Ludovic Hoyet, Motion for Animation and Robotics, 9h, University Rennes 1, France

Master : Ludovic Hoyet, Motion Analysis and Gesture Recognition, 12h, INSA Rennes, France

Master : Ludovic Hoyet, Réalité Virtuelle pour l'Analyse Ergonomique, Master Ingénierie et Ergonomie des Activités Physique, 21h, University Rennes 2, France

Master : Anne-Hélène Olivier, "Biostatistiques", 7H, Master 2 APPCM, University Rennes2, France

Master : Anne-Hélène Olivier, "Evaluation fonctionnelle des pathologies motrices", 9H Master 2 APPCM, University Rennes2, France

Master : Anne-Hélène Olivier, "Maladie neurodégénératives : aspects biomécaniques", 2H Master 1 APPCM, University Rennes2, France

Master : Anne-Hélène Olivier, "Biostatistiques", 7H, Master 1 EOPS, University Rennes2, France

Master : Anne-Hélène Olivier, "Méthodologie", 4H, Master 1 EOPS/APPCM, University Rennes2, France

Master : Anne-Hélène Olivier, "Contrôle moteur : Boucle perceptivo-motrice", 3H, Master 1IEAP, Université Rennes 2, France

Master: Antonio Mucherino, "Programmation Parallèle", M1 en Informatique, 16H, University of Rennes, France

Master: Fabrice Lamarche, "Compilation pour l'image numérique", 29h, Master 1, ESIR, University of Rennes 1, France

Master: Fabrice Lamarche, "Synthèse d'images", 12h, Master 1, ESIR, University of Rennes 1, France

Master: Fabrice Lamarche, "Synthèse d'images avancée", 28h, Master 1, ESIR, University of Rennes 1, France

Master: Fabrice Lamarche, "Modélisation Animation Rendu", 36h, Master 2, ISTIC, University of Rennes 1, France

Master: Fabrice Lamarche, "Jeux vidéo", 26h, Master 2, ESIR, University of Rennes 1, France

Master: Fabrice Lamarche, "Motion for Animation and Robotics", 9h, Master 2 SIF, ISTIC, University of Rennes 1, France.

Master : Armel Crétual, "Méthodologie", leader of the module, 20H, Master 1 M2S, University Rennes2, France

Master : Armel Crétual, "Biostatistiques", leader of the module, 30H, Master 2 M2S, University Rennes2, France

Master : Richard Kulpa, "Boucle analyse-modélisation-simulation du mouvement", 27h, leader of the module, Master 2, Université Rennes 2, France

Master : Richard Kulpa, "Méthodes numériques d'analyse du geste", 27h, leader of the module, Master 2, Université Rennes 2, France

Master : Richard Kulpa, "Cinématique inverse", 3h, leader of the module, Master 2, Université Rennes 2, France

Master: Marc Christie, "Multimedia Mobile", Master 2, leader of the module, 32h, Computer Science, University of Rennes 1, France

Master: Marc Christie, "Projet Industriel Transverse", Master 2, 32h, leader of the module, Computer Science, University of Rennes 1, France

Licence : Franck Multon, "Ergonomie du poste de travail", Licence STAPS L2 & L3, University Rennes2, France

Licence : Anne-Hélène Olivier, "Analyse cinématique du mouvement", 100H , Licence 1, University Rennes 2, France

Licence : Anne-Hélène Olivier, "Anatomie fonctionnelle", 7H , Licence 1, University Rennes 2, France

Licence : Anne-Hélène Olivier, "Effort et efficience", 12H , Licence 2, University Rennes 2, France

Licence : Anne-Hélène Olivier, "Locomotion et handicap", 12H , Licence 3, University Rennes 2, France

Licence : Anne-Hélène Olivier, "Biomécanique spécifique aux APA", 8H , Licence 3, University Rennes 2, France

Licence : Anne-Hélène Olivier, "Biomécanique du vieillissement", 12H , Licence 3, University Rennes 2, France

Licence: Antonio Mucherino, "Informatique 1", 80H, L1, University of Rennes, France

Licence: Charles Pontonnier, "Serial robotics", 34H (L3), École Normale Supérieure de Rennes, France

Licence: Fabrice Lamarche, "Initiation à l'algorithmique et à la programmation", 56h, License 3, ESIR, University of Rennes 1, France

License: Fabrice Lamarche, "Programmation en C++", 46h, License 3, ESIR, University of Rennes 1, France

Licence: Fabrice Lamarche, "IMA", 24h, License 3, ENS Rennes, ISTIC, University of Rennes 1, France

Licence : Arnel Crétual, "Analyse cinématique du mouvement", 100H, Licence 1, University Rennes 2, France

Licence : Richard Kulpa, "Biomécanique (dynamique en translation et rotation)", 48h, Licence 2, Université Rennes 2, France

Licence : Richard Kulpa, "Méthodes numériques d'analyse du geste", 48h, Licence 3, Université Rennes 2, France

Licence : Richard Kulpa, "Statistiques et informatique", 15h, Licence 3, Université Rennes 2, France

Licence : Marc Christie, "Programmation Impérative 1", leader of the module, University of Rennes 1, France

10.2.2. Supervision

PhD in progress (beginning september 2017): Simon Hilt, Haptique Biofidèle pour l'Interaction en réalité virtuelle, Ecole normale supérieure, Georges Dumont & Charles Pontonnier

PhD in progress (beginning september 2017): Pierre Puchaud, Développement d'un modèle musculo-squelettique générique du soldat en vue du support de son activité physique, Ecole normale supérieure, Charles Pontonnier & Nicolas Bideau & Georges Dumont

PhD in progress: Diane Dewez, Avatar-Based Interaction in Virtual Reality, Oct. 2018, Ferran Argelaguet & Ludovic Hoyet & Anatole Lécuyer

PhD in progress: Rebecca Fribourg, Enhancing Avatars in Virtual Reality through Control, Interactions and Feedback, Sept. 2017, Ferran Argelaguet & Ludovic Hoyet & Anatole Lécuyer

PhD in progress: Florian Berton, Design of a virtual reality platform for studying immersion and behaviours in aggressive crowds, Nov. 2017, Ludovic Hoyet & Anne-Hélène Olivier & Julien Petré

PhD in progress: Benjamin Niay, A framework for synthesizing personalised human motions from motion capture data and perceptual information, Oct. 2018, Ludovic Hoyet & Anne-Hélène Olivier & Julien Petré

PhD in progress: Hugo Brument, Toward user-adapted interactions techniques based on human locomotion laws for navigating in virtual environments, Oct. 2018, Ferran Argelaguet & Anne-Hélène Olivier & Maud Marchal.

PhD in progress: Carole Puil, Impact d'une stimulation plantaire orthétique sur la posture d'individus sains et posturalement déficients au cours de la station debout, et lors de la marche, Oct. 2018, Arnel Crétual & Anne-Hélène Olivier.

PhD in progress: Amaury Louarn, A topology-driven approach to retargeting of filmic style in 3D environments, University of Rennes 1, Oct. 2017, Marc Christie & Fabrice Lamarche & Franck Multon

PhD in progress: Wang Xi, Towards Robust SLAM technologies, University of Rennes 1, Oct. 2018, Marc Christie & Eric Marchand

PhD in progress: Florence Gaillard, Evaluation en situation écologique des capacités fonctionnelles des membres supérieurs d'enfants hémiplegiques, University Rennes 2, decembre 2015, Arnel Crétual & Isabelle Bonan

PhD in progress: Karim Jamal, Les effets des stimulations sensorielles par vibration sur les perturbations posturales secondaires à des troubles de la cognition spatiale après un Accident vasculaire Cérébrale, University Rennes 2, septembre 2016, Isabelle Bonan & Arnel Crétual

PhD in progress: Lyse Leclercq, Intérêt dans les activités physiques du rétablissement de la fonction inertielle des membres supérieurs en cas d'amputation ou d'atrophie, University Rennes 2, septembre 2017, Arnel Créteil

PhD defended in October 2018: Sean D. Lynch, Perception visuelle du mouvement humain dans les interactions lors de tâches locomotrices, M2S - University Rennes 2, septembre 2015, Anne-Hélène Olivier & Richard Kulpa

PhD in progress: Pierre Touzard, Suivi longitudinal du service de jeunes joueurs de tennis élite : identification biomécanique des facteurs de performance et de risque de blessures, University Rennes 2, septembre 2014, Benoit Bideau & Richard Kulpa & Caroline Martin

PhD defended in July 2018: Yacine Said Bouhalia, Approche transversale pour l'analyse et la reconnaissance de gestes 2D et 3D, INSA of Rennes, septembre 2015, Richard Kulpa & Franck Multon & Eric Anquetil

PhD in progress: Charles Faure, Stratégies coopératives et compétitives dans des tâches d'interactions physiques multiples, Université Rennes 2 - ENS Rennes, septembre 2016, Benoit Bideau & Richard Kulpa

PhD in progress: Théo Perrin, Evaluation de l'influence des feedbacks sur la capacité d'apprentissage dans le cadre d'interactions complexes entre joueurs et influence de ces feedbacks en fonction de l'activité sportive, Université Rennes 2 - ENS Rennes, septembre 2017, Benoit Bideau & Richard Kulpa

PhD in progress: Jean Basset, Realistic Pose Motion Transfer, Inria, October 2018, Franck Multon & Edmond Boyer

PhD in progress: Olfa Haj Mamhoud, Monitoring de l'efficacité gestuelle d'opérateurs sur postes de travail, University Rennes2, September 2018, Franck Multon & Georges Dumont & Charles Pontonnier

PhD in progress: Hiep Tuan Pham, Heterogeneous data fusion for safeguarding of cultural heritage of dance, University of Reims Champagne Ardennes, October 2018, Celine Loscos & Franck Multon

10.2.3. Juries

PhD: 2018, Marien Couvertier, Identification des paramètres inertiels segmentaires humains, Université de Poitiers. 2018 december 18st, Georges Dumont Rapporteur.

PhD: 2018, Jing Chang, Évaluation des risques de troubles musculo-squelettiques liés au travail basée sur OpenSim, École centrales de Nantes, 2018 november 30, Georges Dumont, Rapporteur.

PhD: 2018, David Desseuve, Pour une meilleure compréhension du rôle des positions d'accouchement en mécanique obstétricale: Analyse biomécanique des postures segmentaires, Université de Poitiers, Arnel Créteil, Rapporteur

HDR: 2018, Antonio Mucherino, On the Discretization of Distance Geometry: Theory, Algorithms and Applications, 2018 July, Franck Multon, Examineur

HDR: 2018, Hazem Wannous, Towards Understanding Human Behavior by Time-Series Analysis of 3D Motion, Université Lille, 2018 December 5, Franck Multon, Président

PhD: 2018, Margarita Khokhlova, Evaluation clinique de la démarche à partir de données 3D, Université Bourgogne, 2018 November 19, Franck Multon, Rapporteur

PhD: 2018, Martin Bossard, Visual perception of selfmotion: the relative contribution of viewpoint oscillation to the perception of distance travelled, Aix-Marseille Université, 2018 October, Richard Kulpa, Président

Adrien Verhulst, Étude de faisabilité d'Études Consommateurs d'Achat de Fruits et Légumes « Moches » dans un Supermarché Virtuel, Ecole Centrale de Nantes, Franck Multon, 2018 July 4, Examineur

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

Franck Multon is coordinator of Inria national initiative "Sport Inria" in relation with the French Ministry of Sports, and the French Ministry of Research, for Olympic Games 2024

10.3.2. Articles and contents

Co-author of a book dedicated to undergraduate STAPS students, Elsevier Health Sciences, Sept. 2018. « STAPS: anatomie, physiologie, neurosciences et biomécanique » (P Delamarche, F Multon, T Horrut, V Nougier). Author of the chapter entitled « Biomécanique de la performance motrice » (47 pages).

Book chapter "Réalité virtuelle au service du sport" in a book "Corps et Sport" dedicated to general public, pages 148–164, Editions de la Martinière, 2018.

Book chapter "The democratization of VR-AR" in a book "Virtual Reality and Augmented Reality: Myths and Realities" dedicated to general public, pages 73-123, ISTE Ltd, 2018.

Book chapter "Vers une démocratisation de la RV-RA ?" in a book "Réalité virtuelle et réalité augmentée" dedicated to general public, pages 95-141, ISTE Ltd, 2018.

10.3.3. Interventions

Richard Kulpa was member of the scientific committee for temporary exhibition (1000m²) entitled "Corps et Sport" in "Cité des sciences et de l'industrie", Octobre 16th 2018 to January 5th 2019. The idea is to propose a new approach of sports to the wide public audience.

POTIOC Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- EduIHM 2018 (workshop at IHM 2018), Martin Hachet
- 5th Sino-French Workshop on Virtual reality (Chengdu, August 2018), Pascal Guitton
- 3rd International OpenViBE workshop, IEEE SMC 2018, (Miyazaki, Japan, October 2018), Fabien Lotte
- Workshop “Turning negative into positives! Exploiting “negative” results in Brain-Machine Interface research”, International BCI Meeting 2018, Asilomar, CA, USA, Fabien Lotte

10.1.1.2. Member of the Organizing Committees

- Workshop VR/AR in BCI, BCI Meeting Asilomar, USA, May 2018, Jelena Mladenovic
- Workshop “Collaborative and Competing Multi-Brain BCI’s”, International BCI Meeting 2018, Asilomar, CA, USA, Fabien Lotte
- "3ème journée Nationale sur le neurofeedback : a forward step towards closed loop", Lyon, France, May 2018, Fabien Lotte
- Game Accessibility Conference EU 18, CNAM, Paris, October 2018, Pierre-Antoine Cinquin

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

- Cyberworlds 2018, Fabien Lotte
- IEEE Conference on Systems, Man and Cybernetics, Brain-Machine Interface Workshop (IEEE SMC) 2018, Fabien Lotte
- International Workshop on Pattern Recognition in NeuroImaging (PRNI) 2018, Fabien Lotte
- International Neuroergonomics Conference 2018 (Fabien Lotte)
- International BCI Meeting 2018, Fabien Lotte
- Augmented Human Conference (AH), 2018, Fabien Lotte

10.1.2.2. Reviewer

- ACM CHI 2018 and 2019
- ACM UIST 2018
- ACM MobileHCI 2018
- ACM IDC 2018
- ACM CHI Play 2018
- IEEE VR 2018
- 4th IEEE VR 3DCVE Workshop 2018
- IEEE SMC 2018
- ICMI 2018
- MCPMD Workshop, ICMI 2018
- Augmented Human 2018

- MobileCHI 2018
- ICASSP 2018
- Int. BCI Meeting 2018
- JJC-ICON 2018
- Neuroergonomics 2018
- PRNI 2018
- Cyberworlds 2018
- NIPS 2018
- Games User Research EU Conference 2018
- Conférence ISCRAM 2019

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- IEEE Computer Graphics and Applications, Martin Hachet
- Journal of Neural Engineering, Fabien Lotte
- Brain-Computer Interfaces, Fabien Lotte

10.1.3.2. Reviewer - Reviewing Activities

- Plos One
- Journal of Neural Engineering
- Computational Intelligence and Neuroscience
- Cognitive Computation
- Frontiers in Neuroscience
- IEEE Signal Processing Letters
- IEEE TVCG
- IEEE TBME
- IEEE Trans. Games
- IEEE TNSRE
- IEEE CGA
- IJHCS
- ACM TOCHI
- ACM TACCESS
- Springer Nature Scientific Reports

10.1.4. Invited Talks

- "Comment rendre accessible les enseignements en ligne comme les MOOC pour des étudiants en situation de handicap", Colloque Sensibilisation et regards croisés autour du handicap, 18-19 janvier 2018, Bordeaux, Pascal Guitton
- "Défis et opportunités pour l'Accessibilité numérique", 20ème anniversaire BrailleNet, 14 juin 2018, Issy les moulineaux, Pascal Guitton
- "Accessibilité numérique des systèmes d'enseignement en ligne pour des personnes en situation de handicap d'origine cognitif", 2ième Journée scientifique du centre d'excellence BIND (CHU & Université de Bordeaux) "Innovation technologique et maladies neurodégénératives", 23 novembre 2018, Bordeaux, Pascal Guitton

- "Measuring Intrinsic motivation/curiosity through Electroencephalography", UQAM Psychology Lab Montreal, Canada, Aurélien Appriou
- "Endowing the Machine with Active Inference in a P300 BCI", Seminar of Computational Neuroscience, Inria Bordeaux, November 2018, Jelena Mladenovic
- "Combining physiological sensing and User modeling for intuitive HCI at Intelligent User Interfaces: Eye Tracking and Beyond", Workshop in Haifa University, Israel, April 2018, Jelena Mladenovic
- "Taxonomy for Adaptive BCI: User and Task Modeling at Brain-computer communication: Towards real world applications", BCI Conference in IDC Herzlyia, Israel, March 2018, Jelena Mladenovic
- "Learning to control Mental Imagery-based Brain-Computer Interfaces", Journées Scientifiques Inria, Bordeaux, France, June 2018, Fabien Lotte,
- "L'interaction Cerveau-Ordinateur", Pause de l'institut des études avancées de l'université de Bordeaux, Cadillac, France, June 2018, Fabien Lotte
- "Models and tools to design non-invasive Brain-Computer Interfaces", Neurocampus annual meeting day, Bordeaux, May 2018, Fabien Lotte
- "Understanding and Redefining User Training to Mental Imagery-based Brain-Computer Interfaces Control", Laboratoire d'Étude des Mécanismes Cognitifs (EMC), Lyon, France, April 2018, Fabien Lotte
- "Redefining user training in BCI/Neurofeedback by combining machine learning, neuroscience and psychology", 2018 RIKEN-BSI-Cichocki Laboratory Alumni Japan Workshop on Frontier of Multidisciplinary Research: Brain Signal Processing and Multiway Data Mining Wakoshi, Saitama, Japan, March, 2018, Fabien Lotte
- "Learning for BCI and BCI for Learning", BCI Symposium "Brain-computer communication: Towards real world applications", Tel Aviv, Israel, March 2018, Fabien Lotte
- "Redefining User Training in Mental Imagery-based Brain-Computer Interfaces", ESPCI, Paris, February 2018, Fabien Lotte
- Présentation des travaux avec l'IRSA, 39ième congrès de la FISAF, Lauren Thevin

10.1.5. Scientific Expertise

- Expert for "Credit Impot Recherche", Martin Hachet
- Expert for the ANR, Committee CES33 "Interaction, Robotics and IA", Fabien Lotte

10.1.6. Research Administration

- Member of "Bureau du comite des projets", Martin Hachet
- Member of "Conseil administration de l'AFIHM", Martin Hachet
- Member of scientific committee of SCRIME, Martin Hachet
- Elected member of the board of the French BCI society (CORTICO), Fabien Lotte
- Representative of Inria for NEM, Fabien Lotte
- Member of Commission de recrutement des Inspecteurs Généraux de l'Education Nationale (IGEN), Pascal Guitton
- Responsable of Inria Cellule de veille et de prospective, Pascal Guitton
- Member of Inria Ethical Committee (COERLE), Pascal Guitton
- Member of Inria Comité Parité et Egalité, Pascal Guitton
- Responsable of Inria RA2020 Committee (new annual Activity Report), Pascal Guitton
- Member of Inria International Chairs Committee, Pascal Guitton

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

- Master: Martin Hachet, Réalité Virtuelle, 12h eqTD, M2 Cognitive science, Université de Bordeaux
- Master : Philippe Giraudeau, Handicap et Nouvelles technologies, 9h eqTD, M2 Cognitive science, Université de Bordeaux
- Master: Martin Hachet, Réalités Virtuelles et augmentées, 18h eqTD, M2 Computer science, Université de Bordeaux
- Master: Rajkumar Darbar, Réalités Virtuelles et augmentées, 18h eqTD, M2 Computer science, Université de Bordeaux
- Master: Pierre-Antoine Cinquin, Assistive technologies, CM-TD, 15h eqTD, M2 Cognitive Science, Université de Bordeaux
- Master: Léa Pillette, Handicap, Autonomy and cognition, 5h eqTD, M2 Cognitive science, University of Bordeaux
- Master: Fabien Lotte, Réalités Virtuelles et augmentées, 7h eqTD, M2 Computer science, Université de Bordeaux
- Master: Fabien Lotte, Réalité Virtuelle, 5h eqTD, M2 Cognitive science, Université de Bordeaux
- Master: Pascal Guitton, Digital accessibility, CM, 18h eqTD, M1 Cognitive science, University of Bordeaux
- Bachelor: Aurélien Appriou, Knowledge and Representation, 13.5h eqTD, 3rd year BD MIASHS: Cognitive science
- Bachelor: Aurélien Appriou, Knowledge and Representation, 14h eqTD, 3rd year BD MIASHS: Cognitive science
- Bachelor, Aurélien Appriou, Langugages and Mind, 20h eqTD, 3rd year BD MIASHS: Cognitive science
- Bachelor: Lauren Thevin, Culture et Compétences Numériques, Pix (nouveau C2I), 10h eqTD, 1st year, Université de Bordeaux
- IUT : Philippe Giraudeau, Algorithme et programmation, 24h eqTD, 1st year IUT, Université de Bordeaux
- Engineering school: Camille Benaroch, Advanced mathematics and computer science, 61.5h eqTD, 2nd year, ENSAM, Bordeaux
- Engineering school: Martin Hachet, Ergonomie et Interaction, 15h eqTD, 3rd year, ENSEIRB, INP
- Engineering school: Léa Pillette, Knowledge and Representations, 36h eqTD, 1st year, ENSC, INP
- Engineering school: Léa Pillette, IT projects, 8h eqTD, 2nd year, ENSC, INP, Bordeaux
- Engineering school: Lauren Thevin, Intelligence Artificielle, 15h eqTD, 2nd year, ENSC, INP, Bordeaux
- Engineering school: Pierre-Antoine Cinquin, Video Game Accessibility, TD, 18h eqTD, M2 JMIN and STMN, CNAM ENJMIN, Angoulême
- MOOC : Pascal Guitton, Accessibilité numérique, 5 weeks, Plateforme FUN, 3rd session

10.2.2. Supervision

- PhD in progress: Rajkumar Darbar, Actuated Tangible User Interfaces, 1/12/2017, Martin Hachet
- PhD in progress: Philippe Giraudeau, Collaborative learning with tangible and aumented interfaces, 1/10/2017, Martin Hachet
- PhD in progress: Marc Baloup, Interaction with Avatars, 1/10/2018, Martin Hachet (33%)
- PhD in progress: Pierre-Antoine Cinquin, Design and Experimental Validation of Accessible E-learning systems for people with cognitive disabilities, since Sept. 2016, Pascal Guitton (50%)
- PhD in progress: Jelena Mladenovic, User modeling for Adaptive BCI design, 1/1/2016, Fabien Lotte (50%)

- PhD in progress: Léa Pillette, Formative feedback for BCI, 1/10/2016, Fabien Lotte (50%)
- PhD in progress: Aurélien Appriou, Estimating learning-related mental states in EEG, 1/10/2017, Fabien Lotte
- PhD in progress: Camille Benaroch, Computational Modeling of BCI user training, 1/10/2018, Fabien Lotte (50%)

10.2.3. *Juries*

- PhD: Guillaume Cortes [with report], Univ. Rennes, Martin Hachet
- PhD: Alexandra Delmas, Univ. Bordeaux, Martin Hachet
- PhD: Adrien Verhulst, Centrale Nantes, Pascal Guitton
- PhD: Anne-Solène Dris [with report], INSA Rennes, Pascal Guitton
- PhD: Mark Parent [with report], Univ. Laval, Quebec, Canada, Fabien Lotte
- PhD: Ayoub Hajlaoui [with report], Université Pierre et Marie Curie and Telecom Paris, France, Fabien Lotte
- Benjamin Wittevrongel [with report], KU Leuven, Belgium, Fabien Lotte
- PhD: Benjamin Clément, Univ. Bordeaux, France, Fabien Lotte
- PhD: Bertille Somon, Univ. Grenobles Alpes, France, Fabien Lotte
- PhD: Aldo Mora, ESPCI, Paris, France, Fabien Lotte
- HdR: Antonio Capobianco [with report], Univ. Strasbourg, Pascal Guitton
- HdR: Patrick Reuter, Univ. Bordeaux, Pascal Guitton

10.3. Popularization

10.3.1. *Internal or external Inria responsibilities*

- Member of editorial Board of Blog Binaire - Le Monde, Pascal Guitton

10.3.2. *Articles and contents*

- Martin Hachet, *Art et Informatique: Fertilisation croisée*, Blog Binaire - Le Monde, [46]
- Pascal Guitton, *L'accessibilité numérique, pourquoi il faut la développer*, Blog Binaire - Le Monde, [45]
- Bruno Arnaldi, Pascal Guitton & Guillaume Moreau, *Rendez-vous dans 10 ans*, Blog Binaire - Le Monde, [44]

10.3.3. *Education*

- Potioc booth at EdTech days, Bordeaux, May 18
- "Pensez-vous qu'il soit possible de lire dans les pensées?", Scientific debate to launch the "projets indisciplinés" of University of Bordeaux, October 2018, Fabien Lotte
- "La recherche sur les interfaces cerveau-ordinateur chez Potioc", Presentation for Bachelor 3, ENS Lyon, visiting Inria Bordeaux, December 2018, Fabien Lotte
- "Le futur des interfaces : interfaces invisibles", Master Class Festival Futur.e.s, Lauren Thevin
- Booth at Laval Virtual (Espace Révolution)

10.3.4. *Interventions*

- **Pint of Science**, Bordeaux, May 18, Martin Hachet and Philippe Giraudeau
- **Cinema Sciences**, Merignac, April 18, Martin Hachet
- Goûter des sciences / Les petits débrouillards (Figure 9), Bordeaux, December 18, Martin Hachet, Philippe Giraudeau, Théo Segonds, Nicolas Palard

- Organization of a workshop for middle and high school students, Ethnography museum, University of Bordeaux, 8-11th Oct. 2018, Léa Pillette
- "Optimizing humans digital learning by decoding brain activity in real time", Poster, ESOF Toulouse, France, July 2018, Aurélien Appriou
- "Flow theory for optimizing BCI", CogTalk, Bordeaux, November 2018, Jelena Mladenovic
- "Cerveau et jeux vidéo", CogTalk, Bordeaux, March 2018, Pierre-Antoine Cinquin
- L'accessibilité des jeux vidéo, Masterclass Scientific Game Jam, March 2018, Université de Bordeaux
- Seminar for PhD students – Flow theory for optimizing BCI, ISPED Bordeaux, November 2018, Jelena Mladenovic
- "Contrôler un ordinateur par l'activité cérébrale : Mythe ou Réalité ?", Conférence grand public de restitution des pauses de l'institut des études avancées de l'université de Bordeaux, Talence, June 2018, Fabien Lotte
- "Les Interfaces Cerveau-Ordinateur : Progrès et questions", Centre Culturel du Hâ, Bordeaux, France, May 2018, Fabien Lotte
- "Mixed reality for visual impaired people", Cherchons pour Voir & IJA (Institut des Jeunes Aveugles, Toulouse), Apéro Sciences, Lauren Thévin
- "Accessibilité numérique : pourquoi et comment", Inria Tech Talk, Station F, Paris, Pascal Guitton



Figure 9. The Potioc team at Gouter des Sciences / les petits débrouillards, Dec. 18.

10.3.5. Internal action

- Unithé ou Café, Martin Hachet, May 18
- Potioc Demos for 10th anniversary of Inria Bordeaux, Sept. 18
- Fete de la sciences, Demo at CapSciences, Oct. 18.

TITANE Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. Member of the Organizing Committees

- Pierre Alliez: advisory committee of the EUROGRAPHICS annual conference 2018.
- Yuliya Tarabalka: Scientific Advisory Committee of the 2nd International Electronic Conference on Remote Sensing.

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

Pierre Alliez is full paper co-chair of

- EUROGRAPHICS 2019 conference, organized in Genova, May 2019.
- Solid and Physical Modeling 2019, organized in Vancouver, June 2019.

10.1.2.2. Member of the Conference Program Committees

- Pierre Alliez: EUROGRAPHICS Symposium on Geometry Processing, International Conference on Geometric Modeling and Processing, Shape Modeling International, EUROGRAPHICS Workshop on Graphics and Cultural Heritage.
- Florent Lafarge: Area chair of Asian Conference on Computer Vision (ACCV)
- Yuliya Tarabalka: SPIE in Remote Sensing conference, ACIVS conference.

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- Pierre Alliez: associate editor of Computer Graphics Forum, Computer-Aided Geometric Design and Graphical Models. He is also a member of the editorial board of the CGAL open source project.
- Florent Lafarge: associate editor of The Visual Computer since 2015.
- Yuliya Tarabalka: associate editor for IEEE Transactions on image processing since 2018, Springer journal Sensing and Imaging since 2017, the International Journal of Computing since 2017 and journal Remote Sensing since 2017.

10.1.3.2. Reviewer - Reviewing Activities

- Pierre Alliez: reviewer for ACM Transactions on Graphics, ACM Siggraph conference, ACM Siggraph Asia conference, Computer Graphics Forum, CAGD, CAD, Symposium on Geometry Processing, Eurographics workshop on cultural heritage, Geometric Modeling and Processing, Shape Modeling International.
- Florent Lafarge: reviewer for the ISPRS journal of Remote Sensing and Photogrammetry.
- Yuliya Tarabalka: reviewer for the journals IEEE PAMI, IEEE TIP, IEEE TGRS, conferences IEEE IGARSS (student competition selection committee), ACIVS, SPIE, ECRS.

10.1.4. Invited Talks

- Pierre Alliez: invited talk at the Einstein Workshop on Geometry and Physics in Computer Graphics, organized in Berlin.

- Yuliya Tarabalka: keynote at the ACIVS 2018 conference (Advanced Concepts for Intelligent Vision Systems, Poitiers), TERRADATA workshop (Paris, 2018), conference “Challenges for imaging and modeling complex media and processes: The Earth’s interior and earthquake rupture” (Sophia Antipolis, 2018). She also gave an invited tutorial on machine learning at IEEE IGARSS 2018 conference.

10.1.5. Leadership within the Scientific Community

Pierre Alliez is a member of the Steering Committees of the EUROGRAPHICS Symposium on Geometry Processing, EUROGRAPHICS Workshop on Graphics and Cultural Heritage and Executive Board Member for the Solid Modeling Association.

10.1.6. Scientific Expertise

- Pierre Alliez: reviewer for the European commission (two EU projects), ERC, evaluator for the French ANR, Belgium FNRS, Innovation Fund Denmark.
- Yuliya Tarabalka: expert evaluator for the ANR proposals and “Make Our Planet Great Again” CampusFrance proposals.

10.1.7. Research Administration

- Pierre Alliez: member of the scientific committee of the 3IA Côte d’Azur proposal.
- Yuliya Tarabalka: member of the scientific committee of the Academy 3 of the University Cote d’Azur since 2017.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Master: Pierre Alliez and Florent Lafarge, 3D Meshes and Applications, 32h, M2, Ecole des Ponts ParisTech, France.

Master: Pierre Alliez and Florent Lafarge, Ingénierie 3D, 21h, M2, university Nice Sophia Antipolis, France.

Master: Pierre Alliez and Florent Lafarge, Interpolation, 60h, M1, university Nice Sophia Antipolis, France.

Master: Pierre Alliez and Florent Lafarge, Mathématiques pour la géométrie, 30h, M1, EFREI, France.

Master: Florent Lafarge, Traitement d’images numériques, 6h, M2, university Nice Sophia Antipolis, France.

Master: Yuliya Tarabalka, Discrete inference and learning, 12h, M2 MVA, ENS Paris-Saclay & CentraleSupélec, France.

Master: Yuliya Tarabalka, Mathematical methods, 25h, MSc in data sciences and business analytics ESSEC-CS, CentraleSupélec, France.

Licence: Yuliya Tarabalka, Advanced algorithms, 28.5h, L2 Networks and Telecoms, IUT Nice Côte d’Azur, France.

10.2.2. Supervision

PhD defended:

Jean-Dominique Favreau, Compact image vectorization by stochastic approaches, Université Côte d’Azur, defended March 15 [11], Florent Lafarge and Adrien Bousseau.

PhDs in progress:

Hao Fang, Scale-space understanding in urban scenes, since March 2016, Florent Lafarge.

Jean-Philippe Bauchet, City modelling from high resolution satellite images, since October 2016, Florent Lafarge.

Lionel Matteo: From Pleiades images to very high resolution topography in complex zones, since September 2017, Yuliya Tarabalka and Isabelle Manighetti.

Onur Tasar, Using deep learning approaches to devise an efficient representation for large-scale satellite images, since October 2017, Yuliya Tarabalka and Pierre Alliez.

Nicolas Girard, How to structure satellite data, since November 2017, Yuliya Tarabalka.

Flora Quilichini, Geometry Compression, since January 2018, Pierre Alliez and Guillaume Lavoué (INSA Lyon).

Muxingzi Li, Image-based 3D reconstruction of indoor environments, since February 2018, Florent Lafarge and Renaud Marlet (ENPC).

Vincent Vadez, Geometric simplification of satellites for thermal simulation, since August 2018, Pierre Alliez.

10.2.3. *Juries*

Pierre Alliez:

- Thesis committee and president: Arnaud Bletterer (I3S Sophia Antipolis).
- HDR committee and president: Stefanie Wuhler (Inria Grenoble).
- Comité de suivi doctoral: Simon Rodriguez (Inria Sophia Antipolis).
- Comité de suivi doctoral: Julien Renaudeau (Schlumberger).
- Comité de suivi doctoral: Oussama Ennafi (IGN).

Florent Lafarge:

- Thesis reviewer: Hassan Bouchiba (Ecole des Mines Paristech).

Yuliya Tarabalka:

- Thesis committee: Hariprasad Kannan (University Paris-Saclay), Nicolas Audebert (University Bretagne Sud and ONERA).
- Thesis reviewer: Praveer Singh (University Paris-Est), Lloyd Windrim (University of Sydney).

10.3. Popularization

Yuliya Tarabalka gave a seminar for the academic-industrial event “Les rendez-vous Université Côte d’Azur-Entreprise”, May 2018.

10.3.1. *Internal or external Inria responsibilities*

Pierre Alliez is head of science of the Inria Sophia Antipolis Center since September 2018, and member of the Inria evaluation committee.

10.3.2. *Interventions*

- Pierre Alliez gave a seminar and demo for the “fête de la science”, October 7th.

ALMAAnaCH Team

9. Dissemination

9.1. Promoting Scientific Activities

- LR was invited to present an overview of information extraction methods in the humanities in the context of the conference cycle: Ringvorlesung "Open Technology for an Open Society", Jan 2018, Berlin, Germany

9.1.1. Scientific Events Organisation

9.1.1.1. General Chair, Scientific Chair

- LR: Co-chair of the Lexical Data Masterclass, Berlin, 3-7 December <https://digilex.hypotheses.org/551>
- Mohamed Khemakhem: Chair of the GROBID-Camp: Inria de Paris 27th March 2018

9.1.2. Scientific Events Selection

9.1.2.1. Member of the Conference Program/Scientific/Reviewing Committees

- BS: Member of the Program, Scientific or Reviewing Committee of the following conferences and workshops: ACL 2018, NAACL 2018, International Morphology Meeting 2018, Int'l Colloquium on Loanwords and Substrata 2018
- LR: Member of the Program, Scientific or Reviewing Committee of the following conferences and workshops: Fourteenth Joint ACL - ISO Workshop on Interoperable Semantic Annotation, COLING 2018, TPD 2018, ACL 2018, NAACL-HLT 2018, ToTh 2018, ELPUB 2018, DHd2018, LDL-2018, DH 2018
- DS: Member of the Program, Scientific or Reviewing Committee of the following conferences and workshops: ACL 2018, EMNLP 2018, CoNLL 2018, COLING 2018, EthicNLP 2018, LREC 2018, WNUT 2018, LAW-MWE-CxG 2018.
- EVdLC: Program Committee member and reviewer for LREC, ACL, COLING, NAACL, ToTh, EMNLP

9.1.3. Journal

9.1.3.1. Member of the Editorial Boards

- LR: Member of the JTEI advisory board
- LR: Member of the scientific board of the Revue Humanités numériques

9.1.3.2. Reviewer - Reviewing Activities

- BS: Reviewer for the following journals: *Language Resource and Evaluation*, *Traitement Automatique des Langues*
- LR: Reviewer for the following journals: *Language Resource and Evaluation Journal*, *Journal of the TEI*
- DS: Reviewer for the following journals: *TALLIP*, *LRE*, *NLE*, *Poznan Studies in Contemporary Linguistics*, *Computational Linguistics*

9.1.4. Invited Talks

- BS was invited to give a talk to Master 2 computational linguistics students and University staff at the Université Grenoble Alpes (November)

- LR was invited to give talks at Open-Access-Tage, Sep 2018, Graz; Workshop DARIAH-CH, University of Neuchâtel, November 2018; "Stay tuned to the future", an international conference on the impact of research infrastructures for social sciences and humanities – bologna, January 2018; NIMS, Tskuba, Japan, September 2018; Rétro-numérisation de documents historiques et partage dans le Web sémantique : l'exemple de la lexicographie – Atelier de formation annuel du consortium Cahier – Montpellier – 26-29 juin 2018; "Serving Learning and Scholarship", Fiesole retreat, Barcelona, April 2018
- DS was invited to give a talk at the Indiana University's department of linguistics (October), at Bar Ilan University (November) respectively on Noisy User-Generated Content Treebanking and on Tackling language variability via diachronic word embeddings.

9.1.5. Training

- Mohamed Khemakhem chaired and tutored the GROBID-Dictionaries series:
 - BBAW & Praxiling joint workshop - Berlin: February 2018
 - Atelier de formation annuel du consortium Cahier – Montpellier – 26-29 June 2018
 - SADiLaR GROBID-Dictionaries Workshop (Pretoria) : October 26, 2018
 - SADiLaR GROBID-Dictionaries Workshop (Potchefstroom) : October 30, 2018 from
 - SADiLaR GROBID-Dictionaries Workshop (Stellenbosch) : November 2, 2018
 - Lexical Data Masterclass 2018 - Berlin 3-7 December 2018
- Mathilde Reignault attended the ESSLLI 2018 Summer School in Language and Information as part of her doctoral studies training.

9.1.6. Leadership within the Scientific Community

- LR: President of the board of directors of DARIAH (until August 2018)
- LR: Member of the board of directors or the TEI consortium
- LR: President of ISO committee TC 37 (Language and terminology)
- LR: Member of the ELEXIS Interoperability and Sustainability Committee (ISC) — ELEXIS is the European Lexicographic Infrastructure (<https://elex.is>)
- EVdLC: Chairman of the ACL special interest group SIGPARSE
- BS: Member, Deputy Treasurer and Member of the Board of the Société de Linguistique de Paris
- DS: Board member of the French NLP society (Atala, 2017-2020), Vice-President of the Atala and program chair of the "journée d'études".
- DS: Member of the ACL's BIG (Broad Interest Group) Diversity group.
- : Charles Riondet: Co-chair of the DARIAH Guidelines and Standards Working Group.
- : Marie Puren: Co-chair of the DARIAH Guidelines and Standards Working Group.

9.1.7. Scientific Expertise

- BS: member of the recruitment committee for the new "ingénieur d'études" position in Inria Paris's communication department
- LR: has carried out various project assesment expertises for: City University Honk Kong, the go!digital programm at the Austrian Academy of Sciences, the Haifa-Technion Joint Research Submission to Milgrom Foundation, teh Swiss National Science Foundation
- DS: Project evaluation for the Flanders Research Agency.
- EVdLC: Evaluator for a European COST proposal
- EVdLC: Evaluator for the Program Call of DGLFLF on "Langue et Numérique"

9.1.8. Research Administration

- BS: Member of the Board of Inria Paris’s Scientific Committee ("Comité des Projets")
- BS: Member of the International Relations Working Group of Inria’s Scientific and Technological Orientation Council (COST-GTRI)
- BS: Deputy Head of the research strand on Language Resources of the LabEx EFL (Empirical Foundations of Linguistics), and is therefore a deputy member of the Governing Board of the LabEx; BS and DS are in charge of several research operations in the LabEx
- LR: President of the board of directors of DARIAH
- LR: President of the scientific committee of ABES (Agence Bibliographique de l’Enseignement Supérieur)
- LR: President of ISO committee TC 37 (Language and Terminology)
- Mohamed Khemakhem and LR: Project leaders of the ISO 24613-4 LMF “TEI Serialisation”
- LR: Convener of ISO working group TC 37/SC 4/WG 4 (lexical resources)
- LR: Member of the Text Encoding Initiative board
- LR: advisor for scientific information to the director for science at Inria

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- Master: Benoît Sagot (with Emmanuel Dupoux), “Speech and Language Processing”, 20h, M2, Master “Mathématiques, Vision, Apprentissage”, ENS Paris-Saclay, France
- Licence: Djamé Seddah, “Certificat Informatique et Internet”, 30h, L1-L2-L3, Université Paris Sorbonne, France
- Master: Djamé Seddah, “Modèles pour la linguistique computationnelle”, 36h, M1, Université Paris Sorbonne, France
- Master: Djamé Seddah, “Traduction automatique”, 30h, M2, Université Paris Sorbonne, France
- Master: Loïc Grobol, “Introduction à la fouille de textes”, 39h, M1, Université Sorbonne Nouvelle, France
- Master: Yoann Dupont and Loïc Grobol, “Langages de script”, 39h, M2, INALCO, France

9.2.2. Supervision

HdR: Benoît Sagot, “Informatiser le lexique — Modélisation, développement et exploitation de lexiques morphologiques, syntaxiques et sémantiques”, 28th June 2018, mentored by Laurent Romary

PhD in progress: Mohamed Khemakhem, “Structuration automatique de dictionnaires à partir de modèles lexicaux standardisés”, September 2016, Paris Diderot, supervised by Laurent Romary

PhD in progress: Loïc Grobol, “Reconnaissance automatique de chaînes de coréférences en français par combinaison d’apprentissage automatique et de connaissances linguistiques”, “Université Sorbonne Nouvelle”, started in Oct. 2016, supervised by Frédéric Landragin (main supervisor), Isabelle Tellier[†] (main supervisor), Éric de La Clergerie and Marco Dinarelli

PhD in progress: Jack Bowers, “Technology, description and theory in language documentation: creating a comprehensive body of multi-media resources for Mixtepec-Mixtec using standards, ontology and Cognitive Linguistics”, started in Oct. 2016, EPHE, supervised by Laurent Romary

PhD in progress: Axel Herold, “Automatic identification and modeling of etymological information from retro-digitized dictionaries”, October 2016, EPHE, Laurent Romary

PhD in progress: Mathilde Regnault, “Annotation et analyse de corpus hétérogènes”, “Université Sorbonne Nouvelle”, started in Oct. 2017, supervised by Sophie Prévost (main supervisor), Isabelle Tellier[†], and Éric de la Clergerie

PhD in progress: Pedro Ortiz, “Automatic Enrichment of Ancient Dictionaries”, October 2018, Sorbonne Université, supervised by Laurent Romary and Benoît Sagot

PhD in progress: Benjamin Muller, “Multi-task learning for text normalisation, parsing and machine translation”, October 2018, Sorbonne Université, supervised by Benoît Sagot and Djamé Seddah

PhD in progress: José Carlos Rosales, supervised by Guillaume Wisniewski (Limsi) and Djamé Seddah

9.2.3. *Juries*

- BS: president of the Habilitation committee for Kim Gerdes at Université Paris Nanterre on November 29th (Title: “Same Same but Different: Paradigms in Syntax”; Mentor: Sylvain Kahane)
- BS: reviewer (“rapporteur”) in the PhD committee for Sébastien Delecraz at Aix-Marseille Université on December 10th (Title: “Approches jointes texte/image pour la compréhension multimodale de documents”; Supervisor:)
- LR: member of the PhD committee for Cyrille Suire, University of La Rochelle, September 2019 (Title: "Recherche d'information et humanités numériques : une approche et des outils pour l'historien")
- BS: member of the recruiting committee for a communication officer at Inria Paris (Aug–Oct 2018)
- LR: member of the selection committee for the assistant professor position on linguistics and NLP at University of Orléans (May 2018)

9.3. Popularization

9.3.1. *Interventions*

- Welcoming of schoolchildren at Inria Paris (half a day with ALMAnaCH members within an one-week-long stay; December 2018)
- ALMAnaCH members were involved in the Profiterole ANR project’s presentation at the *Salon de l’Innovation* of the conference TALN 2018 (the “SiTAL” show).
- Presentation in Education Network ISN "Informatique et Science du Numérique" (March)
- Invited speaker in a citizen debate on Artificial Intelligence (association "Les coteaux en Seine", Bougival, November 21st 2018)

COML Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. General Chair, Scientific Chair

- E. Dupoux Co-Program Chair of NIPS 2018 workshop on intuitive physics, Montreal.
- E. Dupoux Co-Program chair of of the LEGRAIN Conference on Learning in Humans and Machines, Ecole Normale Supérieure, 2018 (this conference had a scientific, an industrial and a general public track)

9.1.1.2. Member of the Organizing Committees

- Executive committee of SIGMORPHON (Association for Computational Linguistics Special Interest Group, <http://www.sigmorphon.org/>).
- Executive committee of DARCLE www.darcle.org.

9.1.2. Scientific Events Selection

9.1.2.1. Reviewer

Invited editor for international conferences: Interspeech, NIPS, ACL, etc. (around 5-10 papers per conferences, 2 conferences per year)

9.1.3. Journal

9.1.3.1. Member of the Editorial Boards

Member of the editorial board of: *Mathématiques et Sciences Humaines*, *L'Année Psychologique*, *Frontiers in Psychology*.

9.1.3.2. Reviewer - Reviewing Activities

Invited Reviewer for *Frontiers in Psychology*, *Cognitive Science*, *Cognition*, *Transactions in Acoustics Signal Processing and Language*, *Speech Communication*, etc. (around 4 papers per year)

9.1.4. Invited Talks

- Nov/29/2018, E. Dupoux, Invited Department Colloquium, Linguistics, U. Maryland: Reverse Engineering Language Acquisition
- Nov/21/2018, E. Dupoux, Invited Department Colloquium, LORIA, Nancy: Developmental AI
- Oct/17/2018, E. Dupoux, Invited Seminar, Departement Physics ENS& chaire Sciences des Données: Reverse Engineering Cognitive Development
- Jul/4/2018, E. Dupoux, Invited Seminar, PRAIRIE AI Summer School: Unsupervised Speech Technology
- Nov/23/2018, E. Dupoux, Invited Seminar, GDR "Cognitive Neurosciences of Development": What AI can bring to Cognitive Development (and vice versa)
- 2018, N. Zeghidour, invited Seminar, LORIA, Nancy: learning from raw waveforms
- 2018, N. Zeghidour, invited Talk, Legrain Conference on AI and Cognition, Paris: learning from raw waveforms

9.1.5. Scientific Expertise

E. Dupoux is invited expert for ERC, ANR, and other granting agencies, or tenure committees (around 2 per year).

9.1.6. Research Administration

E. Dupoux is on the Executive committee of the Foundation Cognition, the research programme IRIS-PSL "Sciences des Données et Données des Sciences", the industrial chair Almerys (2016-) and the collective organization DARCLE (www.darcle.org).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- Master : E. Dupoux, "Theoretical Cognitive Science: Connections and symbols", 8h, M1/M2, PSL, Paris 5, Paris France
- Master : E. Dupoux (with B. Sagot, ALMANACH, N. Zeghidour & R. Riad, COML), "Algorithms for speech and language processing", 30h, M2, (MVA), ENS Cachan, France
- Master : E. Dupoux, "Cognitive Engineering", 80h, M2, ITI-PSL, Paris France
- Doctorat : E. Dupoux, "Computational models of cognitive development", 32 h, Séminaire EHES, Paris France

9.2.2. Supervision

- PhD : Julia Maria Carbajal, Separation and acquisition of two languages in early childhood: a multidisciplinary approach, Ecole Normale Supérieure, sept 21, 2018, co-advised E. Dupoux, S. Peperkamp
- PhD : Adriana Rukoz Gevara, Decoding perceptual epenthesis: Experiments and Modelling., Ecole Normale Supérieure, oct 19, 2018, co-advised E. Dupoux, S. Peperkamp
- PhD in progress : Neil Zeghidour, Learning speech features from raw signals, Feb 2015, co-advised E. Dupoux, N. Usunier (Facebook-CIFRE)
- PhD in progress : Elin Larsen, Models of word learning in infants, Sept 2017, co-advised E. Dupoux, A. Cristia– abandon
- PhD in progress : Rama Chaabouni, Language learning in artificial agents, Sept 2017, co-advised E. Dupoux, M. Baroni (Facebook-CIFRE)
- PhD in progress : Ronan Riochet, Learning models of intuitive physics, Sept 2017, co-advised E. Dupoux, I. Laptev, J. Sivic
- PhD in progress : Rachid Riad, "Speech technology for biomarkers in neurodegenerative diseases", Sept 2018, co-advised E. Dupoux, A.-C. Bachoud-Lévi

9.2.3. Juries

E. Dupoux participated in the PhD Jury of Andreux Mathieu, Nov 12, ENS, 2018.

9.3. Popularization

E. Dupoux talked in two general public conferences on speech technologies, one organized by the Institut Carnot Cognition (La Vilette, oct, 2018), one by the Institut IA in Toulouse (oct 2018), both with around 200 participants. He gave and/or organized smaller meetings geared towards enhancing contacts between industry and research in the general area of AI and Cognition (1 day and a half of scientific meetings between PSL and Facebook, seminar-style intervention with MSR, and with the CVT Athena). He co-chaired the conference Legrain on AI and Cognition which, besides the scientific track had a general public track and an industry track, which were both attended by 100-200 attendees (see <http://olivierlegrain.ens.psl.eu/ia-et-cognition.html>).

N. Zeghidour did a high level presentation of AI in Vivatech on the Facebook Stand (100 000 visitors). He presented the state of the art in ASR and TTS in the BNP Paribas-PRAIRIE Summer School with participants from the IT Industry. He co-redacted a 5 pages popularization article on neural networks and deep learning in the magazine "Tangent, the mathematical adventure" for high school students, 20,000 printed copies.

MULTISPEECH Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

Elected chair, Steering Committee of the Latent Variable Analysis and Signal Separation (LVA/ICA) conference series (E. Vincent)

General co-chair, 5th CHiME Speech Separation and Recognition Challenge, September 2018 (E. Vincent)

General co-chair, 5th International Workshop on Speech Processing in Everyday Environments, Hyderabad, India, September 2018 (E. Vincent)

Area chair, Latent Variable Analysis and Signal Separation (LVA/ICA), July 2018 (A. Deleforge)

Area Chair, INTERSPEECH, September 2018 (D. Jouvét)

Co-chair, special session “Geometry-Aware Auditory Scene Analysis” at ICASSP, April 2018 (A. Deleforge)

Co-chair, special session “Advances in Phase Retrieval and Application” at LVA/ICA, July 2018 (A. Deleforge)

Co-chair, special session “Distant speech processing for smart speakers” at EUSIPCO, September 2018 (R. Serizel)

Chair, IEEE signal processing cup (SPCup), 2019 (A. Deleforge)

10.1.1.2. Member of Organizing Committees

Steering Committee of the Detection and Classification of Acoustic Scenes and Events (DCASE) challenge series (E. Vincent)

Organizing Committee of Automatic Speaker Verification Spoofing and Countermeasures Challenge 2019 (ASVspoof 2019) (M. Sahidullah)

Organizing Committee of the DCASE challenge series, 2018 (R. Serizel)

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

Review chair, IEEE Technical Committee on Audio and Acoustic Signal Processing, responsible for organizing the review of the 443 papers submitted to the 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) in the general AASP domain (E. Vincent)

10.1.2.2. Member of Conference Program Committees

Plate-Forme Intelligence Artificielle (PFIA), July 2018 (A. Bonneau, S. Ouni, R. Serizel)

International Conference on Multimedia and Network Information Systems (MISSI), September, 2018 (D. Jouvét)

International Conference on Speech and Computer (SPECOM), September 2018 (D. Jouvét)

International Conference on Text, Speech, and Dialogue (TSD), September 2018 (D. Jouvét)

10.1.2.3. Reviewer

ACLing 2018 - Arabic Computational Linguistics series (D. Jouvét)

APSIPA ASC 2018 - Asia-Pacific Signal and Information Processing Association - Annual Summit and Conference (M. Sahidullah)
 CHiME 2018 - International Workshop on Speech Processing in Everyday Environments (E. Vincent)
 EUSIPCO 2018 - European Signal Processing Conference (D. Jovet, M. Sahidullah, R. Serizel)
 ICASSP 2018 - IEEE International Conference on Acoustics, Speech and Signal Processing (A. Deleforge, I. Illina, D. Jovet, S. Ouni, R. Serizel, E. Vincent)
 ICPR 2018 - International Conference on Pattern Recognition (M. Sahidullah)
 INTERSPEECH 2018 (A. Bonneau, I. Illina, S. Ouni, M. Sahidullah, E. Vincent)
 IROS 2018 - International Conference on Intelligent Robots (A. Deleforge)
 IWAENC 2018 - International Workshop on Acoustic Signal Enhancement (E. Vincent)
 JEP 2018 - Journées d'Etudes sur la Parole (A. Bonneau, Y. Laprie, S. Ouni)
 LVA/ICA 2018 - International Conference on Latent Variable Analysis and Signal Separation (E. Vincent)
 MISSI 2018 - International Conference on Multimedia and Network Information Systems (D. Jovet)
 Speaker Odyssey 2018 - The Speaker and Language Recognition Workshop (M. Sahidullah)
 SPECOM 2018 - International Conference on Speech and Computer (D. Jovet)
 SPEECH PROSODY 2018 (A. Bonneau, A. Deleforge, D. Jovet)
 SLT 2018 - IEEE Spoken Language Technology Workshop (D. Jovet, M. Sahidullah, I. Illina)

10.1.3. Journal

10.1.3.1. Member of Editorial Boards

Speech Communication (D. Jovet)
 Speech Communication, special issue on Realism in Robust Speech and Language Processing (E. Vincent)
 EURASIP Journal on Audio, Speech, and Music Processing (Y. Laprie)

10.1.3.2. Reviewer - Reviewing Activities

Computers in Biology and Medicine (M. Sahidullah)
 Computer Speech & Language (M. Sahidullah)
 Digital Signal Processing (M. Sahidullah)
 Expert Systems With Applications (M. Sahidullah)
 IEEE Access (M. Sahidullah)
 IEEE/ACM Transactions on Audio, Speech, and Language Processing (A. Deleforge, M. Sahidullah, R. Serizel)
 IEEE Journal of Selected Topics in Signal Processing (A. Deleforge, R. Serizel)
 IEEE Signal Processing Letters (A. Deleforge, M. Sahidullah)
 IEEE Transactions on Emerging Topics in Computational Intelligence (R. Serizel)
 IEEE Transactions on Multimedia (S. Ouni)
 Jasa Express Letters (Y. Laprie)
 Journal of the Acoustical Society of America (Y. Laprie, S. Ouni)
 Language Resources and Evaluation (S. Ouni)
 Signal Processing Letters (D. Jovet)
 Speech Communication (A. Deleforge, M. Sahidullah)

10.1.4. Invited Talks

Deep learning for distant-microphone speech enhancement and recognition, Facebook AI Research, Paris, January 2018 (E. Vincent)

Multidimensional and multi-level learning of music structure for machine improvisation in the DYCI2 project, University Pompeu Fabra, Spain, February 2018 (E. Vincent)

Des difficultés aux troubles de l'apprentissage de la lecture – Impact sur l'estime de soi. Canopé, Nancy, February 2018 (A. Piquard-Kipffer)

A brief introduction to deep learning and its application to multichannel speech enhancement, Laboratoire des systèmes perceptifs, Paris, March 2018 (R. Serizel)

Speaker embeddings: from i-vector to x-vector and beyond in summer school on Machine Learning Applied to Speech Technology and Autonomous Agents, University of Eastern Finland, Finland, August 2018 (M. Sahidullah)

10.1.5. Leadership within the Scientific Community

Elected chair, ISCA Special Interest Group on Robust Speech Processing, until September 2018 (E. Vincent)

Secretary/Treasurer, executive member of AVISA (Auditory-VISual Speech Association), an ISCA Special Interest Group (S. Ouni)

10.1.6. Scientific Expertise

Expertise of ANR project proposals (Y. Laprie)

Expertise of an ASTRID proposal (R. Serizel)

Expertise of a Netherlands Orgaanisnisation for Scientific Research (NWO) proposal (R. Serizel)

Member of an expertise Committee for specific language disabilities (MDPH 54) (A. Piquard-Kipffer)

10.1.7. Research Administration

Head of the AM2I Scientific Pole of Université de Lorraine (Y. Laprie)

Vice Scientific Deputy of Inria Nancy - Grand Est (E. Vincent)

Member of Management board of Université de Lorraine (Y. Laprie)

Member of the Comité Espace Transfert of Inria Nancy - Grand Est (E. Vincent)

Member of the HCERES committee for the Laboratoire Psychologie de la Perception (E. Vincent)

Member of the HCERES committee for the LIMSI laboratory (D. Jouvét)

Vice-chair of the recrutement jury for an Associate Professor, Polytech Nancy (E. Vincent)

Member of the national recruitment jury for Inria Junior Research Scientists (E. Vincent)

Member of the Commission du personnel scientifique of Inria Nancy - Grand Est (R. Serizel)

Member of the Commission développement technologique of Inria Nancy - Grand Est (R. Serizel)

Member of "Commission paritaire" of Université de Lorraine (Y. Laprie)

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

DUT: I. Illina, Programming in Java, 150 hours, L1, University of Lorraine, France

DUT: I. Illina, Linux System, 65 hours, L1, University of Lorraine, France

DUT: I. Illina, Supervision of student projects and stages, 50 hours, L2, University of Lorraine, France

- DUT: S. Ouni, Programming in Java, 24 hours, L1, University of Lorraine, France
- DUT: S. Ouni, Web Programming, 24 hours, L1, University of Lorraine, France
- DUT: S. Ouni, Graphical User Interface, 96 hours, L1, University of Lorraine, France
- DUT: S. Ouni, Advanced Algorithms, 24 hours, L2, University of Lorraine, France
- DUT: R. Serizel, Computer science basics, 90 hours, L1, University of Lorraine, France
- DUT: R. Serizel, Introduction to office software applications, 18 hours, L2, University of Lorraine, France
- DUT: R. Serizel, Multimedia and web applications, 20 hours, L1, University of Lorraine, France
- DUT: R. Serizel, Multimedia content indexing, 20 hours, L2, University of Lorraine, France
- Licence: A. Bonneau, Phonetics, 17 hours, L2, Ecole d'audioprothèse, University of Lorraine, France
- Licence: A. Bonneau, Speech manipulations, 2 hours, L1, Ecole d'orthophonie, University of Lorraine, France
- Licence: V. Colotte, C2i - Certificat Informatique et Internet, 50 hours, L1, University of Lorraine, France
- Licence: V. Colotte, System, 45 hours, L3, University of Lorraine, France
- Licence: O. Mella, Introduction to Web Programming, 30 hours, L1, University of Lorraine, France
- Licence: O. Mella, Computer Networking, 98 hours, L2-L3, University of Lorraine, France
- Licence: A. Piquard-Kipffer, Education Science, 32 hours, L1, Département d'Orthophonie, University of Lorraine, France
- Licence: A. Piquard-Kipffer, Learning to Read, 34 hours, L2, Département d'Orthophonie, University of Lorraine, France
- Licence: A. Piquard-Kipffer, Dyslexia, Dysorthographia, 12 hours, L3, Département d'Orthophonie, University of Lorraine, France
- Licence: A. Piquard-Kipffer, Mathematics Didactics, 9 hours, L3, Département d'Orthophonie, University of Lorraine, France
- Master: V. Colotte, Introduction to Speech Analysis and Recognition, 18 hours, M1, University of Lorraine, France
- Master: V. Colotte, Integration project: multimodal interaction with Pepper, 10 hours, M2, University of Lorraine, France
- Master: D. Jouvét, Speech recognition, 12 hours, M2 University of Lorraine, France
- Master: D. Jouvét and S. Ouni, Multimodal oral communication, 24 hours, M2, University of Lorraine, France
- Master: Y. Laprie, Analysis, perception and automatic recognition of speech, 30 hours, M1, University of Lorraine, France
- Master: O. Mella, Computer Networking, 76 hours, M1, University of Lorraine, France
- Master: S. Ouni, Multimedia in Distributed Information Systems, 31 hours, M2, University of Lorraine, France
- Master: E. Vincent and T. Biasutto-Lervat, Neural networks, 38 hours, M2, University of Lorraine
- Master: A. Piquard-Kipffer, Dyslexia, Dysorthographia diagnosis, 6 hours, M1, Département d'Orthophonie, University of Lorraine, France
- Master: A. Piquard-Kipffer, Deaf people and reading, 21 hours, Département d'Orthophonie, University of Lorraine, France
- Master: A. Piquard-Kipffer, Psycholinguistics, 20 hours, Département d'Orthophonie, University Pierre et Marie Curie-Paris, France

Master: A. Piquard-Kipffer, French Language Didactics, 53 hours, ESPE, University of Lorraine, France

Master: A. Piquard-Kipffer, Psychology, 6 hours, M2, Department of Psychology, University of Lorraine, France

Continuous training: O. Mella, Computer science courses for secondary school teachers (ISN courses), 21 hours, ESPE, University of Lorraine, France

Continuous training: A. Piquard-Kipffer, Special Educational Needs, 53 hours, ESPE, University of Lorraine, France

Doctorat: A. Piquard-Kipffer, Language Pathology, 20 hours, EHESP, University of Sorbonne-Paris cité, France

Other: V. Colotte, Responsible for “Certificat Informatique et Internet” for the University of Lorraine, France (50000 students, 30 departments)

10.2.2. Supervision

PhD: Ken Déguernel, “Apprentissage de structures musicales en contexte d’improvisation”, University of Lorraine, March 6, 2018, Emmanuel Vincent and Gérard Assayag (IRCAM) [10].

PhD: Baldwin Dumortier, “Contrôle acoustique d’un parc éolien”, University of Lorraine, September 25, 2018, Emmanuel Vincent and Madalina Deaconu (Inria Tosca) [9].

PhD in progress: Amal Houdhek, “Synthèse paramétrique de parole arabe”, December 2015, cotutelle, Vincent Colotte, Denis Juvet and Zied Mnasri (ENIT, Tunisia).

PhD in progress: Imène Zangar, “Amélioration de la qualité de synthèse vocale par HMM pour la parole arabe”, December 2015, codirection, Vincent Colotte, Denis Juvet and Zied Mnasri (ENIT, Tunisia).

PhD in progress: Amine Menacer, “Traduction automatique de vidéos”, May 2016, Kamel Smaïli and Denis Juvet.

PhD in progress: Mathieu Fontaine, “Processus alpha-stable pour le traitement du signal”, May 2016, Antoine Liutkus and Roland Badeau (Télécom ParisTech).

PhD in progress: Anastasiia Tsukanova, “Coarticulation modeling in articulatory synthesis”, May 2016, Yves Laprie.

PhD in progress: Nathan Libermann, “Deep learning for musical structure analysis and generation”, October 2016, Frédéric Bimbot (IRISA) and Emmanuel Vincent.

PhD in progress: Lauréline Perotin, “Séparation aveugle de sources sonores en milieu réverbérant”, November 2016, Romain Serizel, Emmanuel Vincent, and Alexandre Guérin (Orange).

PhD in progress: Théo Biasutto, “Multimodal coarticulation modeling: Towards the animation of an intelligible speaking head”, December 2016, Slim Ouni.

PhD in progress: Sara Dahmani, “Modeling facial expressions to animate a realistic 3D virtual talking head”, January 2017, Slim Ouni and Vincent Colotte.

PhD in progress: Guillaume Carbajal, “Apprentissage profond bout-en-bout pour le rehaussement de la parole”, March 2017, Romain Serizel, Emmanuel Vincent, and Éric Humbert (Invoxia).

PhD in progress: Sunit Sivasankaran, “Exploiting contextual information in the speech processing chain”, July 2017, Dominique Fohr and Emmanuel Vincent.

PhD in progress: Ioannis Douros, “Combining cineMRI and static MRI to analyze speech production”, July 2017, Pierre-André Vuissoz (IADI) and Yves Laprie.

PhD in progress: Diego Di Carlo, “Estimating the Geometry of Audio Scenes Using Virtually-Supervised Learning”, October 2017, Antoine Deleforge and Nancy Bertin.

PhD in progress: Lou Lee, “Du lexique au discours: les particules discursives en français”, October 2017, Yvon Keromnes and Mathilde Dargnat (ATILF) and Denis Juvet.

PhD in progress: Nicolas Turpault, “Deep learning for sound scene analysis in real environments”, January 2018, Romain Serizel and Emmanuel Vincent.

PhD in progress: Raphaël Duroselle, “Adaptation de domaine par réseaux de neurones appliquée au traitement de la parole”, September 2018, Denis Jovet and Irina Illina.

PhD in progress: Nicolas Furnon, “Deep-learning based speech enhancement with ad-hoc microphone arrays”, October 2018, Romain Serizel, Irina Illina and Slim Essid (Télécom ParisTech).

PhD in progress: Ajinkya Kulkarni, "Synthèse de parole expressive par apprentissage profond", October 2018, Vincent Colotte and Denis Jovet.

PhD in progress: Manuel Pariente, “Deep learning-based phase-aware audio signal modeling and estimation”, October 2018, Antoine Deleforge and Emmanuel Vincent.

PhD in progress: Adrien Dufraux, “Leveraging noisy, incomplete, or implicit labels for automatic speech recognition”, November 2018, Emmanuel Vincent, Armelle Brun (LORIA), and Matthijs Douze (Facebook AI Research).

10.2.3. *Juries*

10.2.3.1. *Participation in HDR and PhD juries*

Participation in the Habilitation (HDR) Jury for Anthony Larcher (University of Le Mans, December 2018), D. Jovet

Participation in the PhD jury of Anastasios Alexandridis (University of Crete, January 2018), E. Vincent.

Participation in the PhD jury of Marius Miron (University Pompeu Fabra, Spain, February 2018), E. Vincent, reviewer.

Participation in the PhD jury of Victor Bisot (Télécom ParisTech, March 2018), E. Vincent, reviewer.

Participation in the PhD jury of Boaz Schwarz (Bar-Ilan university, Israel, March 2018), A. Deleforge, reviewer.

Participation in the PhD jury of Jean-Rémy Gloaguen (École Centrale de Nantes, October 2018), E. Vincent, reviewer.

Participation in the PhD jury of Mathieu Andreux (Université Paris Sciences et Lettres, November 2018), E. Vincent, reviewer.

Participation in the PhD jury of Ming Xiu (Université de Strasbourg, December 2018), Y. Laprie.

10.2.3.2. *Participation in other juries*

Participation in CAFIPEMPF Jury - Master Learning Facilitator, Académie de Nancy-Metz & Université de Lorraine, April, May 2018, A. Piquard-Kipffer

Participation in the Competitive Entrance Examination into Speech-Language Pathology Department, University of Lorraine, June 2018, A. Piquard-Kipffer.

10.3. Popularization

- Participation to the "Ada Lovelace Day" organized by Inria Nancy - Grand Est, October 2018 (A. Bonneau).

10.3.1. *Articles and contents*

- Interview for “GAFA : la voix est libre”, le Magazine de la Rédaction, *France Culture*, January 5, 2018 (E. Vincent)
- Interview for “Les enceintes connectées vont révolutionner vos vies et vous ne pourrez plus vous en passer”, *18h39.fr*, February 22, 2018 (E. Vincent)

- Interview for “Annecy 2018 : Dynalips, solution de lip-sync automatisée.”, *3DVF.com*, June 18, 2018 (S. Ouni)

10.3.2. Interventions

- Demonstration at Journée des métiers, Collège Péguy, le Chesnay, April 2018 (A. Piquard-Kipffer)
- Exhibition of an automatic lip-sync system at The Annecy International Animation Film Festival, Annecy, 12-15 June 2018 (S. Dahmani, V. Girard, T. Biasutto-Lervat, S. Ouni)
- Demonstration at Fête de la Science, University of Lorraine, October 12, 2018 (N. Turpault, R. Serizel, E. Vincent)
- Demonstration and participation in a panel discussion at Forum des Sciences Cognitives, Artem, Nancy, November 7, 2018 (N. Turpault, E. Vincent)
- Invitation to Serbia Science Festival 2018 (Belgrade) by the French institute of Serbia to give four popularization lectures and present a demonstration on "teaching robots to hear us", November 2018 (A. Deleforge).

PANAMA Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

- Rémi Gribonval, the scientific organizer of the **13th Peyresq summer school in signal and image processing**, jointly organized in July 2018 by **GRETSI** and **GDR ISIS**.
- Rémi Gribonval, scientific and organization board of the **Conference on Deep Learning: from Theory to Applications** organized in the framework of the LABEX Centre Henri Lebesgue, Rennes, September 4-6 2018.
- Valentin Gillot and Romain Lebarbenchon, event coordinators of the 2018 Science and Music Day (Journée Science et Musique) organized by IRISA.

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

- Nancy Bertin and Frédéric Bimbot, coordinators of the Science and Music Young Researcher Award (Prix Jeune Chercheur Science et Musique).
- Rémi Gribonval and Frédéric Bimbot, scientific coordinators of the Science and Music Day (Journée Science et Musique) organized by IRISA.

10.1.2.2. Member of the Conference Program Committees

- Antoine Deleforge, Area Chair in Bayesian Inference for the 14th International Conference on Latent Variable Analysis and Signal Separation (LVA/ICA 2018).
- Nancy, Area Chair in Sparsity-related Methods for the 14th International Conference on Latent Variable Analysis and Signal Separation (LVA/ICA 2018).
- Nancy, member of the program committee of the Journées d'Informatique Musicale (JIM 2018, Amiens, France).
- Rémi Gribonval, member of the program committee of the GRETSI.

10.1.2.3. Organization of special sessions

- Antoine Deleforge, organizer and co-chair with Ivan Dokmanic and Robin Schliebler of a special session on "Geometry-Aware Auditory Scene Analysis" at ICASSP 2018, Calgary, Canada.
- Antoine Deleforge, organizer and co-chair with Angélique Drémeau of a special session on "Advances in Phase Retrieval and Applications" at LVA/ICA 2018, Guildford, UK.

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- Frédéric Bimbot appointed as Editor-in-Chief of the international journal *Speech Communication*.
- Rémi Gribonval, Associate Editor of the international journal *Constructive Approximation*.

10.1.4. Invited Talks

- Frédéric Bimbot, JIM 2018 (Journées d'Informatique Musicale) in Amiens, France.
- Frédéric Bimbot, JEP 2018 (Journées d'Etudes sur la Parole), in Aix-en-Provence, France.
- Rémi Gribonval, Oberwolfach workshop on Applied Harmonic Analysis and Data Processing, March 25-31 2018, in Oberwolfach, Germany.

- Rémi Gribonval, CM+X workshop on Inverse Problems and Machine Learning, Feb 8-11 2018, in Caltech, Los Angeles, USA.
- Nancy Bertin, JJCAAS (Journées Jeunes Chercheurs en Audition, Acoustique musicale et Signal audio), June 6-8 2018, in Brest, France.

10.1.5. Scientific Expertise

- Rémi Gribonval, vice-president of the Scientific Advisory Board of the Acoustics Research Institute from the Austrian Academy of Sciences in Vienna.
- Frédéric Bimbot, member of the International Advisory Council of ISCA (International Speech Communication Association).
- Frédéric Bimbot, member of the ANR Expert Scientific Committee n°38, dedicated to the Digital Revolution and its relations to Knowledge and Culture.
- Rémi Gribonval, member of the EURASIP Special Area Team (SAT) on Signal and Data Analytics for Machine Learning (SiG-DML) since 2015.
- Antoine Deleforge, member of the IEEE Audio and Acoustic Signal Processing Technical Committee.

10.1.6. Research Administration

- Frédéric Bimbot, Head of the "Digital Signals and Images, Robotics" department in IRISA (UMR 6074) until June 2018.
- Rémi Gribonval, member of the organization committee of the 2019 [GDR ISIS / GRETSI / Club EAA thesis prize in signal and image processing](#).

10.2. Teaching - Supervision - Juries

Master : N. Bertin, "Vocal and Audio Interactions", 4 hours, M2, Université Rennes 1, France.

Master : N. Bertin, "Fundamentals of Signal Processing", 24 hours, M1, Ecole Normale Supérieure (ENS) de Bretagne, Rennes, France.

Master : N. Bertin, "Foundations of Smart Sensing", 9 hours, M2, Ecole Nationale de la Statistique et de l'Analyse de l'Information (ENSAI), Rennes, France.

Master : N. Bertin, "Sparsity in Signal and Image Processing", 12 hours, M2, Institut National des Sciences Appliquées (INSA) de Rennes, France.

Master : R. Gribonval, "High dimensional statistical learning", 12 hours, M2, Université Rennes 1, France.

Master: R. Gribonval, coordination of the HDL module "High dimensional statistical learning" within the SIF M2, 20 hours, Université Rennes 1, France.

Master : R. Gribonval, "Sparsity in Signal and Image Processing", 8 hours, M2, Institut National des Sciences Appliquées (INSA) de Rennes, France.

Master : R. Gribonval, coordination of the module "Sparsity in Signal and Image Processing", 48 hours, M2, Institut National des Sciences Appliquées (INSA) de Rennes, France.

Bachelor : A. Deleforge, "Discovery of selected topics in audio signal processing research", 6 hours, L3, École Supérieure de Réalisation Audiovisuelle (ESRA), France.

Master : A. Deleforge, "Sparsity in Signal and Image Processing", 4 hours, M2, Institut National des Sciences Appliquées (INSA) de Rennes, France.

Master : A. Deleforge, "Vocal and Audio Interaction", 6 hours, M2, Université Rennes 1, France.

Master : F. Bimbot, coordination of the VAI module "Vocal and Acoustic Interactions" within the SIF M2, 20 hours, Université de Rennes 1, France

10.3. Popularization

10.3.1. Journée Science et Musique (JSM 2018)

Participants: Valentin Gillot, Romain Lebarbenchon, Rémi Gribonval, Nancy Bertin, Frédéric Bimbot, Ewen Camberlein, Stéphanie Lemaile, Corentin Louboutin, Antoine Chatalic, Clément Gaultier, Cássio Fraga Dantas, Diego Di Carlo.

with contributions and support from: Valérie Gouranton, Ronan Gagne, Florian Nouviale, Evelyne Orain, Agnès Cottais, Catherine Jacques-Orban and many more.

PANAMA coordinated the organization of a public event called “Journée Science et Musique” (“Music and Science Day”). This yearly event organized by the METISS/ PANAMA Team since 2011 aims at sharing with the wide audience the latest innovations and research projects in music. The motivation for hosting this event is to explain and promote the technology behind audio-processing that people face in their daily lives. The event is free to everyone and people have the possibility to attend talks by selected speakers or meet numerous experts that demonstrate current projects in which people can interactively participate. Edition 2018 hosted approximately 500 visitors and was a partner of the “Festival des Sciences” and “Festival Maintenant” in Rennes.

10.3.2. 250th Anniversary of Joseph Fourier’s birth

Participants: Nancy Bertin, Frédéric Bimbot, Antoine Deleforge, Rémi Gribonval.

PANAMA has been involved in the *Comité Fourier 250* by participating to, and triggering interest for the 250th Anniversary of Joseph Fourier’s birth, in the framework of *Commémorations Nationales* for the year 2018. In particular, Frédéric Bimbot has been invited to give a talk at the JEP 2018 on Fourier’s heritage in Speech Processing, and the *Journée Science et Musique 2018* (see above) has included a conference where Fourier’s Transform was introduced and called for to explain concepts relating to music perception.

10.3.3. Articles and contents

Rémi Gribonval wrote an article published online on Interstices [47]

SEMAGRAMME Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific Events Selection

8.1.1.1. Chair of Conference Program Committees

- Sylvain Pogodalla: co-chair of **FG 2018** 23rd Conference on Formal Grammar [23].

8.1.1.2. Member of Conference Program Committees

- Philippe de Groote: *The 23rd Conference on Formal Grammar*.
- Maxime Amblard: 25ème conférence sur le Traitement Automatique des Langues Naturelles (TALN 2018)

8.1.1.3. Reviewer

- Guy Perrier: **Universal Dependencies Workshop 2018**.
- Sylvain Pogodalla: **Symposium on Logic and Algorithms in Computational Linguistics 2018 (LACompLing2018)**, 25ème conférence sur le Traitement Automatique des Langues Naturelles (TALN 2018).
- Maxime Amblard: **The 56th Annual Meeting of the Association for Computational Linguistics**, 25ème conférence sur le Traitement Automatique des Langues Naturelles (TALN 2018)

8.1.2. Journal

8.1.2.1. Member of Editorial Boards

- Philippe de Groote: area editor of the *FoLLI-LNCS series*; associate editor of *Higher-Order and Symbolic Computation*; member of the editorial board of *Cahiers du Centre de Logique*.
- Sylvain Pogodalla: Member of the editorial board of the journal *Traitement Automatique des Langues*, in charge of the *Résumés de thèses* section.
- Maxime Amblard: Member of the editorial board of the journal *Traitement Automatique des Langues*, in charge of the hard copy editorial process, Editor of the (In)coherence of Discourse (upcoming volume of the **Language, Cognition, and Mind** series)

8.1.2.2. Reviewer - Reviewing Activities

- Philippe de Groote: **Journal of Language, Logic and Information**, **Journal of Logic and Computation**, **The Review of Symbolic Logic**.
- Sylvain Pogodalla: (In)coherence of Discourse (upcoming volume of the **Language, Cognition, and Mind** series), **Journal of Language, Logic and Information**.
- Maxime Amblard: (In)coherence of Discourse (upcoming volume of the **Language, Cognition, and Mind** series), **Journal of Language, Logic and Information**, **ACM - Transaction on multimedia computing communication**, *Traitement Automatique des Langues*.

8.1.3. Invited Talks

- Philippe de Groote gave an invited talk at the *Symposium on Logic and Algorithms in Computational Linguistics 2018 (LACompLing 2018)*, 28-31 August 2018, Stockholm, Sweden [11].
- Maxime Amblard gave four invited talks:
 - at the *Colloque Cathy Dufour*, November 2018, Nancy [6];
 - at the *EMLex lecture series/Séminaire de l'ATILF*, March 2018, Nancy [7];

- at the *Recherches linguistiques et corpus, séminaire STIH de la Faculté des Lettres de Sorbonne Université*, March 2018, Paris [9];
- at the *Linguistique textuelle, linguistique de corpus*, April 2018, Metz [8].
- Maria Boritchev gave a talk to the *Séminaire des doctorantes et doctorants en informatique*, June 2018, Paris [10].

8.1.4. Leadership within the Scientific Community

- Philippe de Groote: president of SIGMOL, *Association for Mathematics of Language, a Special Interest Group of the Association for Computational Linguistics*; member of the LACL steering committee.
- Bruno Guillaume: Management Committee Substitute of the COST Action CA16105 "European Network for Combining Language Learning with Crowdsourcing Techniques" (http://www.cost.eu/COST_Actions/ca/CA16105).
- Sylvain Pogodalla: member of the LACL steering committee; member of the Formal Grammar standing committee.
- Maxime Amblard: head of the work package on Natural Language Processing of the OLKI project (PIA funding), leader of the semantics topic for the national pre-GDR on *Traitement Automatique des Langues*.

8.1.5. Scientific Expertise

- Philippe de Groote: member of the scientific council of the LIRMM, *Laboratoire d'Informatique, de Robotique et de Microélectronique de Montpellier*; member of the scientific council of the AREN e-FRAN project, *ARgumentation Et Numérique*.
- Sylvain Pogodalla: expert for the Research Executive Agency (REA) of the EU.
- Maxime Amblard: expert for the *Agence Nationale pour la Recherche* (ANR), expert for the *Haut Conseil de l'évaluation de la recherche et de l'enseignement supérieur* (HCERES).

8.1.6. Research Administration

- Philippe de Groote:
 - Member of the *bureau du comité des projets d'Inria Nancy – Grand Est*.
- Sylvain Pogodalla:
 - Elected member of the *comité de centre d'Inria Nancy – Grand Est*, in charge of the *commission IES (information et édition scientifique du centre d'Inria Nancy – Grand Est)*.
- Bruno Guillaume:
 - Head of the Loria department NLPKD (Natural Language Processing and Knowledge Discovery).
 - Animator of the CPER 2015-2020 project *Langues, Connaissances et Humanités Numériques* (Languages, Knowledge and Digital Humanities) in which ten laboratories of the *Université de Lorraine* participate.
 - Member of the Comipers (Inria committee for PhD and Post-doctoral selection).
- Maxime Amblard:
 - Member of *conseil scientifique* of *Université de Lorraine*, in charge of the working group on *publicants*.
 - Standing invitee at the *pôle scientifique AM2I* of *Université de Lorraine*.
 - Member of the *Sénat Académique* of *Université de Lorraine*.
 - Member of the progress commission of *Université de Lorraine*.

- Member of the administration council of the *Institut des sciences du digital, management et cognition*.
- Member of the board of the Maison des sciences de l'homme, MSH-Lorraine.
- Head of the master in Natural Language Processing (master 1 and 2).
- Member of the McF selection committee 4373 (section 7 and 27), Université Paris Sorbonne.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence:

- Maxime Amblard, Introduction au TAL, 4h, L1, Université de Lorraine, France
- Maxime Amblard, Ingénierie linguistique, 20h, L3, Université de Lorraine, France
- Timothée Bernard, Algorithmique, 24h, L3, Université Paris Diderot, France.
- Clement Beysson, Représentation Avancée de Données, 20h, L2, Université de Lorraine, France.
- Clement Beysson, NUMOC, 40h, L1, Université de Lorraine, France.
- Clement Beysson, Algorithmique et Programmation 1, 16h, L1, Université de Lorraine, France.
- Clement Beysson, Introduction aux bases de données, 8h, L2, Université de Lorraine, France.
- Clement Beysson, Système 2, 12h, L3, Université de Lorraine, France.
- Maria Boritchev, Formalismes et représentations de raisonnements, 20h, L3, Université de Lorraine, France
- Maria Boritchev, Algorithmique 1, 22h, L1, Université de Lorraine, France
- Pierre Ludmann, Informatique 1, 20h, L3, Mines Nancy, France.
- Pierre Ludmann, Informatique 2, 40h, L3, Mines Nancy, France.

Master:

- Maxime Amblard, Python Programming (english), 44h, M1, Université de Lorraine, France.
- Maxime Amblard, Algorithms (english), 30h, M1, Université de Lorraine, France.
- Maxime Amblard, Methods for NLP (english), 36h, M1, Université de Lorraine, France.
- Maxime Amblard, Remise à niveau (english), 3h, M1/M2, Université de Lorraine, France.
- Maxime Amblard, Formalisms (english), 24h, M2, Université de Lorraine, France.
- Maxime Amblard, Programming Project (english), 3h, M2, Université de Lorraine, France.
- Timothée Bernard, Projet TAL, 18h, L3/M1, Université Paris Diderot, France.
- Timothée Bernard, Sémantique computationnelle, 20h, M1, Université Paris Diderot, France.
- Clement Beysson, Algorithmique et Complexité, 22h, M1, Université de Lorraine, France.
- Maria Boritchev, Technology and Innovation (english), 15h, M1, Université de Lorraine, France.
- Maria Boritchev, Remise à niveau (english), 3h, M1/M2, Université de Lorraine, France
- Philippe de Groote, Computational Semantics, 18h, M2, Université de Lorraine, France.

Philippe de Groot, Computational structures and logics for natural language modeling, 18h, M2, Université Paris Diderot – Paris 7, France.

Bruno Guillaume, Remise à niveau TAL (english), 6h, M1/M2, Université de Lorraine, France.

Bruno Guillaume, Written Corpora TAL (english), 30h, M1, Université de Lorraine, France.

Pierre Ludmann, Introduction à C/C++, M1/M2, Mines Nancy, France.

8.2.2. Supervision

PhD in progress:

William Babonnaud, *Sémantique lexicale, compositionnalité et coercition de types*, since September 2018, Philippe de Groot.

Clement Beysson, *Quantificateurs généralisés dynamiques pour l'analyse discursive*, since September 2015, Philippe de Groot and Bruno Guillaume.

Maria Boritchev, *Dialogue Dynamics Modeling in the Simple Theory of Types*, since September 2017, Maxime Amblard and Philippe de Groot.

Pierre Ludmann, *Construction dynamique des structures discursives*, since September 2017, Philippe de Groot and Sylvain Pogodalla.

8.2.3. Juries

- Maxime Amblard was member of the jury of the master thesis of the master of NLP (12 students).
- Maxime Amblard was member of the jury PhD thesis of Mehdi Mirzapour, Modeling Preferences for Ambiguous Utterance Interpretations, September 28th, 2018, Université de Montpellier.
- Michel Musiol was member of the jury PhD thesis of Marine Labalestra November 21th, 2018, Université de Reims Champagne Ardenne
- Michel Musiol was member of the jury PhD thesis of Sarah Del Goleto, *Du déficit de l'intégration contextuelle au trouble de la mentalisation dans la schizophrénie - études électrophysiologiques et comportementales de la compréhension de l'ironie.*, December 4th 2018, Université Paris 8

8.3. Popularization

8.3.1. Internal or External Inria Responsibilities

- Maxime Amblard is the vice head of editorial board of Interstices.info

8.3.2. Articles and Contents

- Karën Fort and Bruno Guillaume have published an article in Interstices [27] about ZombiLingo. The paper explain to non-specialists how crowdsourcing may be used to build resources that are needed for Natural Language Processing applications. They explain the aim of the project.
- Maxime Amblard has written articles for Interstices.info as *Idée reçue : Les algorithmes prennent-ils des décisions ?*

8.3.3. Education

- Maxime Amblard participates in the event *S'orienter et se réorienter dans les sciences numériques* under the patronage of FAFIEC, ONISEP Grand Est and Académie de Nancy-Metz, November 14th, 2018

8.3.4. Interventions

- Maria Boritchev participated in *Samedi des curieux*, March 2018, Paris France: [Comment confondre de faux témoignages ?](#)

- Maxime Amblard participates in the Ada Lovelace day in Nancy Grand-Est
- Maxime Amblard gave a talk about ethics in Artificial Intelligence at the *Café des Sciences* of the Cognitive science student association
- Maxime Amblard was organizer of the *forum des sciences cognitives 2018* in Nancy
- Maxime Amblard has organized and supervised two panel discussions (new trend in IT recruitment and New Challenge for Neural Networks in Artificial Intelligence and NLP) for the *forum des sciences cognitives 2018*

8.3.5. Creation of Media or Tools for Science Outreach

- Maxime Amblard was the leader of the project Happy Family card Games, where a group of 10 researchers develop such a game for promoting computer science as a scientific field and give epistemological perspectives. More than 10 000 copies are printed and the promotion of the project will be in 2019.

AUCTUS Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

Within the Human Systems Integration DAS of the AESE Pole (see expertise section), a daily workshop has been organized the 9/11/2018 at Agen Agropole. The title of the workshop was: “Comment l’IA peut-elle améliorer l’interaction homme-machine?”. Jean-Marc Salotti and David Daney participated to the organization of the workshop. Jean-Marc Salotti presented a talk entitled: “Introduction aux concepts de l’intelligence artificielle”.

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

- David Daney co-organized the international workshop “Assistance and Service Robotics in a Human Environment: From Personal Mobility Aids to Rehabilitation-Oriented Robotics” at IROS 2018, Madrid.

10.1.2.2. Member of the Conference Program Committees

- IROS 2018 (IEEE/RSJ International Conference on Intelligent Robots and Systems) [Vincent Padois, associate editor]
- ICRA 2019 (IEEE/RAS International Conference on Robotics and Automation) [Vincent Padois, associate editor]

10.1.2.3. Reviewer

- ICRA 2019 (2019 IEEE International Conference on Robotics and Automation) [Vincent Padois, David Daney]
- IROS 2018 (IEEE/RSJ International Conference on Intelligent Robots and Systems) [David Daney, Vincent Padois]
- Humanoids 2018 (IEEE-RAS International Conference on Humanoid Robots) [Ganna Pugach]
- International Symposium on Experimental Robotics 2018 [Vincent Padois]

10.1.3. Journal

10.1.3.1. Reviewer - Reviewing Activities

- Mechanism and Machine Theory [David Daney]
- Acta Astronautica [Jean-Marc Salotti]
- International Journal of Human Factors Modelling and Simulation [Jean-Marc Salotti]
- behavioral Brain Research [Jean-Marc Salotti]
- Frontiers in Robotics and Artificial Intelligence [Vincent Padois]
- International Journal of Humanoid Robotics [Vincent Padois]
- Robotics and Automation Letters [Vincent Padois]

10.1.4. Invited Talks

- Sylvain Pion gave a talk entitled “The Arithmetic Toolbox in CGAL” at the iRRAM-MPFR-MPC Developers Meeting, in Dagstuhl, Germany on April 18-20, 2018, organized by Paul Zimmermann.

- Jean-Marc Salotti gave a talk at the 18th European Mars Conference that took place in La-Chaux-de-Fonds, Suisse, August 26th to 28th 2018. The title of his conference was “European Mars mission architecture using an enhanced Ariane launcher”.
- Vincent Padois gave a talk entitled “Human-Robot Physical Interaction – Various considerations on collaborative robotics with control in mind” at the 2nd School on Robotics and Social Interactions, in Moliets-et-Maâ, France on October, the 3rd 2018, organized by Ghiles Mostafaoui.
- Vincent Padois gave a talk entitled “GT7 on Humanoid Robotics - An overview of activities in 2017-2018 and some perspectives” at the national biennial meeting of the “Groupement de recherche en Robotique”, in Paris, France on November, the 22nd 2018.

10.1.5. Leadership within the Scientific Community

Vincent Padois is, together with Olivier Stasse from LAAS, the co-animator of GT7 "Humanoid Robotics" of the CNRS “Groupement de Recherche en Robotique” (GDR). The role of animator consists in organizing regular workshops in humanoid robotics with the members of the French research community in this domain. It also consists in reporting strategic elements to the GDR in order to better organize the structure of research in Robotics in France.

10.1.6. Scientific Expertise

Jean-Marc Salotti and David Daney are official animators of the Humans Systems Interactions AESE DAS (Strategic Activities Domain of the Aerospace Valley Pole), which gathers all regional actors concerned with human factors, human systems interactions, and collaborative robotics mainly in the aerospace sector, but not limited to that domain. At least 2 daily workshops are organized each year for the members of the group in order to focus on a specific issue. Jean-Marc Salotti and David Daney are also solicited to examine regional projects linked to the DAS in order to provide advice and eventually to participate to the labelling process of the pole.

10.1.7. Research Administration

Sylvain Pion represents the Auctus team in the CUMI-R (Comité des Utilisateurs des Moyens Informatiques) committee of Inria Bordeaux.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Master: Jean-Marc Salotti, Intelligence Artificielle, 103,5h éqTD, M1, Ecole Nationale Supérieure de Cognitique / Bordeaux INP, France

Master: Jean-Marc Salotti, Facteurs Humains et Ingénierie Cognitive, 15h éqTD, M1, Ecole Nationale Supérieure de Cognitique / Bordeaux INP, France

Master: Jean-Marc Salotti, Interactions Hommes Robots, 15h éqTD, M2, Ecole Nationale Supérieure de Cognitique / Bordeaux INP, France. In this course, all students have practical works involving cobotic systems: programming NAOs and UR3 (Universal Robots) and testing an exoskeleton.

Master: David Daney, Interactions Hommes Robots, 3h éqTD, M2, Ecole Nationale Supérieure de Cognitique / Bordeaux INP, France.

Master: David Daney, Mathématiques pour la robotique, 24h éqTD, M2, Enseirb/Ensc, Bordeaux INP, France.

Master: Vincent Padois, Literature review - What, Why and How?, 20h éqTD, M2, Enseirb/Ensc, Bordeaux INP, France.

10.2.2. Supervision

Defended PhD

- Aurélien Masseur, “Conception d’environnement instrumenté pour la veille à la personne”, Université Côte d’Azur, 2018/11/22

PhD in progress:

- Nassim Benhabib (Inria / Région NA – Woobot project), “Méthodologie de conception et de commande d’un système robotique collaboratif pour assister et sécuriser les gestes d’un opérateur”, November 2018 – , David Daney and Vincent Padois
- Nicolas Simonazzi (CIFRE Orange), “Analyse comportementale et détection des émotions dans le cadre de l’utilisation de chat-bots en ligne”, May 2018 – , Jean-Marc Salotti
- Olfa Jema (Cotutelle Université de Sousse, Tunisie), “Analyse du mouvement humain”, December 2017 – , Lotfi Romdhane, Sami Bennour, David Daney
- Pierre Laguillaumie (Thèse laboratoire PPRIME), “Méthodologie pour la mise en œuvre d’un robot collaboratif de nouvelle génération prenant en compte la sécurité et le confort biomécanique de l’opérateur en situation de travail”, March 2018 – , Jean-Pierre Gazeau and Vincent Padois

10.2.3. Juries

Vincent Padois:

- PhD jury of Thomas Flayols, Examiner, “Exploitation du Retour en Force Pour l’Estimation et le Contrôle des Robots Marcheurs”, Université Fédérale de Toulouse Midi-Pyrénées, 2018/10/12
- PhD jury of David Busson, Reviewer, “Gestion de manipulateurs mobiles et redondants en environnement contraint et dynamique”, École Nationale Supérieure d’Arts et Métiers, 2018/11/26
- PhD jury of Lucas Joseph, Thesis advisor, “An energetic approach to safety in robotic manipulation”, Sorbonne Université, 2018/12/07
- PhD jury of Philipp Schlehuber-Caissier, Thesis advisor, “Contributions to robotic control design with formal stability and safety guarantees”, Sorbonne Université, 2018/12/14
- PhD jury of Florian Golemo, Examiner, “How to Train Your Robot – New Environments for Robotic Training and New Methods for Transferring Policies from the Simulator to the Real Robot”, Université de Bordeaux, 2018/12/19

David Daney:

- PhD jury of Baptiste Bush, Examiner, “Optimization techniques for an ergonomic human-robot interaction”, Université de Bordeaux, 2018/02/27
- PhD jury of Joshua Kevin Pickard, Reviewer, “Analysis and Synthesis Methods for the Appropriate Design of Parallel Mechanisms”, University of New Brunswick, Canada, 2018/03/29
- PhD jury of Aurelien Masseur, Thesis advisor, “Conception d’environnement instrumenté pour la veille à la personne”, Université Côte d’Azur, 2018/11/22
- PhD jury of Oriane Dermay, Reviewer, “Prédiction du mouvement humain pour la robotique collaborative: du geste accompagné au mouvement corps entier”, Université de Lorraine, 2018/12/17
- PhD jury of Adrien Koessler, Invited, “Contribution à l’agrandissement de l’espace de travail opérationnel des robots parallèles”, Université Clermont Auvergne, 2018/12/19

10.3. Popularization

10.3.1. Articles and contents

- Jean-Marc Salotti published an article entitled “La robotique humanoïde”, published in Questions Internationales [8]. It briefly describes the main issues and trends in humanoid robotics. Questions Internationales is a journal from La Documentation Française, which is a brand of the “Direction de l’Information Légale et Administrative”, under the direction of the Central Administration of the French Prime Minister.
- David Daney was interviewed regarding the collaboration of Auctus with AIO on the Numii project [10], [11].

10.3.2. Education

- Collaboration with IUT Angoulême. A delegation of professors from IUT Angoulême, GEII Department, came to visit us on December 4, in order to benefit from our expertise on the use of UR3 (Universal Robots) for teaching activities.

10.3.3. Interventions

- Unithé ou café, Inria Bordeaux, February 26: Anna Pugach gave a presentation: “Le textile intelligent”
- Journée portes ouvertes, 10 ans Inria Bordeaux, September 27: Vincent Padois gave demonstrations on collaborative robotics with the Panda robot
- Village des Sciences, Cap Sciences, Bordeaux, October 13: Jean-Marc Salotti animated a movie/debate: “Un robot peut-il partager vos émotions?”
- Village des Sciences, Cap Sciences, Bordeaux, October 14: Vincent Padois and David Daney gave demonstrations on collaborative robotics with the Panda robot
- ENSC inauguration, November 30: Nassim Benhabib gave demonstrations on collaborative robotics with the Panda robot

Chroma Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- C. Laugier was Program Co-Chair of IEEE/RSJ IROS 2018. He also co-organized in the scope of IROS 2018, three interconnected events on Autonomous vehicles: a Workshop having attracted more than 360 people ⁰; an Industrial Forum involving international companies (e.g. Renault, Nvidia, Baidu, EasyMile, Ambarella, etc) and having attracted about 80 people; an Autonomous Vehicles Demonstration which involved 5 international teams (including Chroma team with our Autonomous Renault Zoe car) ⁰.
- C. Laugier has been appointed as General co-Chair for IEEE/RSJ IROS 2019 (Makau).
- O. Simonin was general co-chair of PDIA 2018 "Perspective et Defis de l'IA" with Y. Demazeau (CNRS), organized in Paris Descartes, by AFIA, on October 11. The 2018 topic was "Véhicule Autonome et Intelligence Artificielle" (~ 80 people).
- O. Simonin is Chair of JFSMA ⁰ 2019 to be organized at the PFIA national platform, in Toulouse, July 2019.
- O. Simonin is co-chair with F. Chaprillet (Inria Larsen) of the National Conference on Robotics (JNRR), to be organized at Vittel, on October 2019.

10.1.1.2. Member of the Organizing Committees

- C. Laugier co-organized with F. Nashashibi (Inria), Ph. Martinet (Inria) and D. Wang (NTU Singapore) two special sessions on Mobile Robotics and Deep Learning at IEEE ICARCV 2018 (Singapore).
- C. Wolf co-organized the Workshop GDR ISIS & GDR IA on Machine Learning and Reasoning for Signal and Image Processing, October 4th (~ 90 people).
- F. Jamel is Member of Organizing Committees of the Robocup@Home league.
- F. Jamel is elected member of Technical Committees of the Robocup@Home league.

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

- O. Simonin is Chair of JFSMA 2019 to be organized at the PFIA national platform, in Toulouse, July 2019.

10.1.2.2. Member of the Conference Program Committees

- C. Laugier was Associate Editor for IEEE ICRA 2018 (Brisbane) and for IEEE ICRA 2019 (Monreal). He was also member of the Senior Program Committee of IEEE/RSJ IROS 2018 (Madrid).
- A. Martinelli was Associate Editor for IEEE ICRA 2019.
- Jilles S. Dibangoye served, in quality of program committee member, for the following conferences: AAI, IJCAI

⁰see : <http://project.inria.fr/ppniv18>

⁰see <http://avdemo.car.upm-csic.es/>

⁰Journées Francophone sur les Systèmes Multi-Agents <https://www.irit.fr/pfia2019/jfsma/>

- O. Simonin served, in quality of program committee member, for the following conferences : AAMAS (Autonomous Agent and Multi-agent Systems International Conference) Track Robotics, ICAPS (International Conference on Automated Planning and Scheduling) Track Robotics.
- O. Simonin is Program Committee member of the JFSMA conference since 2008 (Journées Francophones sur les Systèmes Multi-Agents).
- C. Wolf served, in quality of program committee member, for the following conferences: IJCAI, BMVC, CVPR 2018 Workshop on Human Pose, Motion, Activities and Shape in 3D, ECCV 2018 Workshop on Hands in Action.

10.1.2.3. Reviewer

- Agostino Martinelli served, in quality of reviewer, for following conferences: ICRA, IROS.
- Jilles S. Dibangoye served, in quality of reviewer, for the following conferences: AAAI, IJCAI, ICRA.
- Olivier Simonin served, in quality of reviewer, for the following conferences: IROS, ICAPS, ACC.
- Anne Spalanzani served, in quality of reviewer, for the following conferences: IROS, RO-MAN.
- C. Wolf served, in quality of reviewer, for the following conferences: CVPR, NIPS, ICLR, ICML, IJCAI, BMVC.

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- C. Laugier is Member of the Steering Committee of the journal IEEE Transaction on Intelligent Vehicles.
- C. Laugier is member of the Editorial Board of the journal IEEE ROBOMECH.
- O. Simonin is a member of the editorial board of RIA Revue d'Intelligence Artificielle.

10.1.3.2. Reviewer - Reviewing Activities

- C. Laugier is Senior Editor of the journal IEEE Transaction on Intelligent Vehicles.
- A. Martinelli served, in quality of reviewer, for the following journals: Transaction on Robotics, Transaction on Automatic Control, Robotics and Automation Letters.
- Jilles S. Dibangoye served, in quality of reviewer, for the following journals: Revue d'Intelligence Artificielle, Mathematics and Artificial Intelligence Journal
- O. Simonin served, in quality of reviewer, for the following journals : Autonomous Robots (AURO) and RIA (Revue d'Intelligence Artificielle).
- Anne Spalanzani served, in quality of reviewer, for the International Journal Robotica.

10.1.4. Invited Talks

- O. Simonin was invited for two talks at "Institut d'Automne en IA (IA³) : Robotics" (GDR IA), on October 15th-19th, Toulouse.
- O. Simonin gave an invited talk at the "Journée sur les Systèmes Hors Equilibres" ENS Lyon, November 27 : "Coordination d'essaims de robots, vers des systèmes auto-organisés".
- C. Laugier gave an invited tutorial at "Institut d'Automne en IA (IA³)", GDR IA, Toulouse, October 15-19 2018. *Title: Autonomous Vehicles Technologies for Perception and Decision-making.*
- C. Laugier gave an invited keynote talk at the ECCV 2018 Workshop on "Vision-based Navigation for Autonomous Vehicles", Munich, September 2018. *Title: Dynamic Traffic Scene Understanding using Bayesian Sensor Fusion and Motion Prediction.*
- C. Laugier gave an invited talk at Vedecom SMIV⁰ 2018 conference, Versailles, November 2018. *Title: Dynamic Traffic Scene Understanding: Analysis, Prediction and Collision Risk Assessment.*

⁰Smart Mobility and Intelligent Vehicles

- C. Laugier gave an invited plenary talk at RWIA⁰ 2018 conference, Guangzhou, December 7-10 2018. Title: *Dynamic Scene Understanding and Upcoming Collision Prediction to Improve Autonomous Driving Safety: A Bayesian Approach*.
- A. Spalanzani gave a talk at the "Journée Véhicule autonome et intelligence artificielle" organized by AFIA, Paris Descartes, October 11.
- C. Wolf gave an invited tutorial talk at the national "CORESA" conference, Poitiers, France, on November 12th.
- C. Wolf gave an invited talk at the Strasbourg doctoral school on mathematics, computer science and engineering, Strasbourg, France, on September 21st.
- C. Wolf gave an invited talk at the CVPR 2018 Workshop on "HUMAN 3D: HUMAN pose, Motion, Activities and Shape in 3D", Salt Lake City, USA, June 18th.
- C. Wolf gave an invited talk at the Heudiasyc Laboratory, Compiègne, France, June 5th.
- C. Wolf gave an invited talk at Inria Stars, Nice, France, May 30th.
- C. Wolf gave an invited talk at the LABRI Laboratory, Bordeaux, France, March 5th.
- C. Wolf gave an invited talk at Inria THOTH, Grenoble, France, February 23rd.
- J.S. Dibangoye was an invited talk at "a NeurIPS-18 international workshop on Deep Reinforcement Learning in partially observable domains" (NeurIPS-18), on December, Montreal, Canada.

10.1.5. Leadership within the Scientific Community

- A. Spalanzani served, in quality of Vice President, for the 2018 ANR project selection in Interaction and Robotics.
- C. Laugier is co-chair with Philippe Martinet and Christoph Stiller, of the IEEE RAS Technical Committee on "Autonomous Ground Vehicles and Intelligent Transportation Systems (AGVITS)".
- C. Laugier is member of the Committee "safety of autonomous vehicles" (committee led by ARDI in the scope of the Innovation Regional Strategy).
- C. Laugier is member of the Scientific Committee of the French GDR Robotique.
- C. Laugier is member of several International Award Committee. In 2018, he was Chair of the Best Paper Award Committee of IEEE/RSJ IROS 2018 and Member of several IROS 2018 award committees (Fellow Award, Harashima Award for Innovative Technologies, Distinguished Service Award and Young Professional Award). In 2018, he was also a member of the Best Paper Award Committee of IEEE ICARCV 2018 and Member of the IEEE Chapter Award Committee.
- O. Simonin is an elected member of the Board of AFIA, the French Association for Artificial Intelligence.
- C. Wolf is part of the *Comité de direction* of the GDR ISIS "Information, Signal, Image et Vision" and co-leads its theme "Machine Learning" (together with N. Thome, CNAM)
- C. Wolf is part of the *Comité scientifique* of the GDR IA "Aspects Formels et Algorithmiques de l'Intelligence Artificielle"
- C. Wolf co-leads the theme "Machine Learning and Robotics" of the GDR Robotique (together with D. Filiat, ENSTA)

10.1.6. Scientific Expertise

- C. Laugier is member of the Advisory Board of ISR University of Coimbra.
- C. Laugier is Scientific Advisor for the ProbaYes SA and for Baidu.
- O. Simonin served, in quality of reviewer, for ANR project submissions.
- J. Dibangoye served, in quality of reviewer, for ANR project submissions.

⁰International conference on Robotics Welding, Intelligence and Automation

- C. Wolf was part of the ANR Committee CES 33 "Interaction and Robotics"

10.1.7. Research Administration

- C. Laugier is a member of several Ministerial and Regional French Committees on Robotics and Autonomous Cars.
- O. Simonin is an elected member of the AFIA Council (Association Française pour l'Intelligence Artificielle)
- O. Simonin is member of the Auvergne-Rhone-Alpes Robotics cluster (Coboteam), for Inria and INSA de Lyon entities.
- O. Simonin is member of the Scientific Council of the Digital League (Auvergne-Rhone-Alpes).
- F. Jumel is member of the International RoboCup competition (as Chief Referee for the RoboCup@Home league)
- F. Jumel is member of the board of IMAGINOVE cluster (digital content industry)
- F. Jumel is member of the Rhone-Alpes Robotics cluster (Coboteam)

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

CPE Lyon 4-5th year : F. Jumel, resp. of the Robotics option, 400h M1/ M2, Dept. SN CPE Lyon France.

CPE Lyon 4-5th year : F. Jumel, 250h (robotic vision, cognitive science, Interface robot machine, deeplearning, Robotic frameworks, robotic plateforms, Kalman Filter)

INSA Lyon 3rd year : Jilles S. Dibangoye, Algorithmics, 24h, L3, Dept. Telecom INSA de Lyon, France.

INSA Lyon 3rd year : Jilles S. Dibangoye, WEB, 42h, L3, Dept. Telecom INSA de Lyon, France.

INSA Lyon 3rd year : Jilles S. Dibangoye, Operating Systems, 56h, L3, Dept. Telecom INSA de Lyon, France.

INSA Lyon 4rd year : Jilles S. Dibangoye, Operating Systems, 16h, Master, Dept. Telecom INSA de Lyon, France.

INSA Lyon 5th year : Jilles S. Dibangoye, the Robotics option : AI for Robotics, Robotics projects, 8h, M2, Dept. Telecom INSA de Lyon, France.

M2R MoSIG: A. Martinelli, Autonomous Robotics, 12h, ENSIMAG Grenoble.

INSA Lyon 5th year : O. Simonin, Resp. of the Robotics option (25 students): AI for Robotics, Software and Hardware for robotics, Robotics projects, 90h, M2, Telecom Dept., France.

INSA Lyon 3rd year : O. Simonin, Resp. of Introduction to Algorithmics, 32h (100 students), L3, Telecom Dept., France.

INSA Lyon 5th year : A. Spalanzani, Navigation en environnement humain, 2h, M2, INSA de Lyon, France.

Master : Laetitia Matignon, Multi-Agents and Self-* Systems, 10h TD, M2 Artificial Intelligence, Lyon 1 University, France.

Master : Laetitia Matignon, Multi-Robot Systems, 20h TD, 5th year of engineer, Polytech Lyon Informatics Department, France.

10.2.2. Supervision

PhD in progress: David Sierra Gonzalez, Autonomous Driving (cooperation Toyota), 2014, C. Laugier, J. Dibangoye, E. Mazer (Inria Prima). Defense planned in March 2019.

PhD in progress: Mathieu Barbier, Decision making for Intelligent Vehicles (cooperation Renault), 2015, C. Laugier, O. Simonin and E. Mazer (Inria Pervasive Interaction). Defense planned in April 2019.

PhD in progress: Mihai Popescu, Robot fleet mobility under communication constraints, 2015, O. Simonin, A. Spalanzani, F. Valois (CITI/Inria Agora).

PhD in progress: Pavan Vasishta, Natural vision based perception and prediction, 2016, A. Spalanzani and D. Vaufreydaz (Inria Pervasive Interaction)

PhD in progress: Guillaume Bono, Global-local Optimization Under Uncertainty for Goods Distribution Using a Fleet of Autonomous Vehicles, 2016, O. Simonin, J. Dibangoye, L. Matignon.

PhD in progress: Remy Grunblatt, Mobilité contrôlée dans les réseaux de drones autonomes", 2017, I. Guerrin-Lassous (Inria Dante) and O. Simonin.

Starting PhD: Maria Kabtoul, Proactive Navigation in dense crowds, A. Spalanzani and P. Martinet (Inria Chorale).

Starting PhD: Manon Prédhumeau, Crowd simulation and autonomous vehicle, A. Spalanzani and J. Dugdale (LIG Hawaii).

Starting PhD: Luiz Serafim-Guardini, Conduite Automobile Autonome : Utilisation de grilles d'occupation probabilistes dynamiques pour la planification contextualisée de trajectoire d'urgence à criticité minimale, A. Spalanzani, C. Laugier, P. Martinet (Inria Chorale).

Starting PhD: Benoît Renault, Navigation coopérative et sociale de robots mobiles en environnement modifiable, O. Simonin and J. Saraydaryan.

Starting PhD: Edward Beeching, Large-scale automatic learning of autonomous agent behavior with structured deep reinforcement learning, C. Wolf, O. Simonin and J. Dibangoye.

10.2.3. *Juries*

1. PhD thesis juries

- C. Laugier was reviewer and president of the defense committee of the PhD thesis of Fernando Ireta Munoz, I3S Sophia-Antipolis, April 4th 2018.
- C. Laugier was member of the defense committee of the PhD thesis of Tomasz Kucners, Örebro University (Sweden), September 20th 2018.
- O. Simonin was reviewer and member of the defense committee of the PhD thesis of Nesrine Mahdouï Chedly, Compiègne (UTC), December 7th, 2018.
- O. Simonin was reviewer and member of the defense committee of the PhD thesis of Thadeu Knychala Tucci, Université Franche Comté, Montbéliard, November 12th, 2018.
- C. Wolf was reviewer and member of the defense committee of the PhD thesis of Michaël Blot, Sorbonne Université, Paris, November 11th.
- C. Wolf was reviewer and member of the defense committee of the PhD thesis of Farhood Negin, Université de Nice, Inria Stars, October 15th.
- C. Wolf was reviewer and member of the defense committee of the PhD thesis of Bruno Stuner, Université de Rouen, June 11th.
- C. Wolf was member of the defense committee of the PhD thesis of Stéphane Lathuilière, Université de Grenoble, Inria Perception, May 22nd.
- C. Wolf was reviewer and member of the defense committee of the PhD thesis of Nicolas Chesneau, Université de Grenoble, Inria Thoth, February 2nd.

10.3. Popularization

10.3.1. *Articles and contents*

- O. Simonin participated to the writing of "Livre blanc sur les Véhicules Autonomes et Connectés"⁰
- O. Simonin given several interviews in order to popularize AI & Robotics, and Autonomous Vehicles: JDN (Journal du Net), INSA letter, etc.
- C. Laugier, J. Lussereau and J.A. David have been interviewed in October 2018 by Radio France in order to popularize Autonomous Vehicles. The interview has been broadcasted by France Bleu Isere on October 11th 2018 at respectively 6:40 a.m and 8:15 a.m.

10.3.2. Education

- J. Dibangoye created a MOOC on deep reinforcement learning for drones, which will be launched in 2019 on OpenClassRooms.

10.3.3. Interventions

- C. Wolf gave a talk for developers at the journée ARAMIS on May 24th.
- C. Wolf gave a talk for developers at the conference #MixIT, Lyon on April 20th.

10.3.4. Internal action

- Demo "Crazyflie micro-drones" at the Journées Recherche Inria & Industrie (O. Simonin and S. d'Alu), Paris, November 20th. Lien video : <https://youtu.be/TgwrB4xpJOA>

⁰<https://www.inria.fr/actualite/actualites-inria/livre-blanc-vehicules-autonomes-et-connectes>

DEFROST Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- Gang Zheng is a vice-chair of the IFAC Technical Committee “Social Impact of Automation”, International Federation of Automatic Control, TC9.2
- Gang Zheng is co-chair of the working group “Commande et pilotage en environnement incertain” of GRAISYHM

10.1.1.2. Member of the Organizing Committees

- Gang Zheng, Associate Editor, SIAM CT19, Chengdu, China (SIAM Conference of Control & Its Applications 2019)

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

- Gang Zheng is IPC member of SIAM-CT19, ICSRT 2019, ICFCTA 2019.

10.1.2.2. Reviewer

Kruszewski:

- ICRA
- ECC
- ACC

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- Gang Zheng is the member of Editorial Board, Journal of Control Science and Engineering.
- Christian Duriez is member of Editorial Board of IEEE Transactions on Haptics

10.1.3.2. Reviewer - Reviewing Activities

Kruszewski:

- Systems & Control Letters
- Fuzzy Sets and Systems
- IEEE TFS
- Automatica
- IET Control Theory & Applications
- IEEE TCST
- IEEE Transactions on Industrial Informatics
- Nonlinear Analysis: Hybrid Systems

Olivier Goury:

- IEEE Robotics and Automation Letters

Christian Duriez:

- IEEE Robotics and Automation Letters
- IEEE Transactions on Robotics
- ACM Transactions on Graphics
- Computer Methods in Applied Mechanics and Engineering

Thor Morales Bieze:

- MDPI Actuators
- IEEE Transactions on Robotics
- Soft Robotics
- IEEE Robotics & Automation Magazine

10.1.3.3. Tutorials

- A tutorial on the Soft-Robotics plugin for SOFA was presented at the IEEE International Conference on Soft Robotics (Robosoft 2018) in Livorno.
- Tutorials about SOFA Plugins *BeamAdapter*, *Soft-Robots* and *Model Order Reduction* were presented during the 1st International SOFA week 2018 in Strasbourg.

10.1.4. Invited Talks

Christian Duriez:

- Stanford Robotic Seminar
- Harvard School of Engineering
- University of Madison Department of Mechanical Engineering
- Tufts University, Soft robotics seminar
- MIT CSAIL
- Toyota Research (Los Altos, California)
- Séminaire de Robotique, Université Jules Verne d'Amiens

10.1.5. Leadership within the Scientific Community

Christian Duriez has been invited to participate to the NSF-NIST-DARPA- workshop on “Simulation and Machine Learning in Robotics”. The outcome was to have an impact on the future calls of research projects in the field.

10.1.6. Scientific Expertise

Christian Duriez has been expert for evaluation of ANR Projects and is an evaluator of the European project (FET) Hybridheart. Damien Marchal has been expert for evaluation of HCERES.

10.1.7. Research Administration

A. Kruszewski and C. Duriez are members of the Laboratory council (CRISAL). C. Duriez is vice-president of the “Commission des Emplois de Recherche” of Lille. O. Goury is an elected member of the “Comité de Centre” of Inria Lille.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Ingénieur: Kruszewski, Start & Go Metallophone, 15h, niveau L3, Centrale Lille, France

Ingénieur: Kruszewski, Start & Go Robotique, 46h, niveau L3, Centrale Lille, France

Ingénieur: Kruszewski, Start & Go Conception et environnement, 6h, niveau L3, Centrale Lille, France

Ingénieur: Kruszewski, Modélisation et commande de système: application à la robotique, 17h, niveau L3, Centrale Lille, France

Ingénieur: Kruszewski, Projet recherche, 12h, niveau M1, Centrale Lille, France

Master 2: Christian Duriez, Simulation physique interactive, 24h, Université de Lille

10.2.2. Supervision

PhD in progress: Thieffry, Modélisation et contrôle de robots déformables à grande vitesse, 01/09/2016, C. Duriez, T.M. Guerra, A. Kruszewski

PhD in progress: Zhang, New methods of visual servoing for soft-robots, 01/10/2015, C. Duriez, J. Dequidt, A. Kruszewski

PhD in progress: Coevoet, Méthodes d'optimisation pour la robotique déformable, 01/05/2017, C. Duriez

PhD in Progress: F. Vanneste, Design and simulation of Soft Robots made of mesostructured materials, 01/12/2018, C Duriez, O. Goury

PhD in Progress: Walid Amehri, Property analysis of soft robots, G. Zheng, A. Kruszewski

10.2.3. Juries

Christian Duriez a participé aux jurys suivant:

PhD: Yinoussa Adagolodjo, Couplage de La robotique et de la simulation médicale pour les procédures automatisées, Université de Strasbourg, septembre 2018, M De Matelin et H. Courtecuisse (président du jury)

PhD: Inderjeet Singh, Curve Based Approach for Shape Reconstruction of Continuum Manipulators, R. Merzouki (examinateur)

PhD in progress: Camille Krewcun, Simulation personnalisée de l'implantation de stent à partir de la géométrie coronaire acquise en imagerie OCT, PhD start: 1er octobre 2016, encadrant(s): Laurent Sarry, Emilie Péry

PhD in progress: LAGNEAU Romain, Data-driven models for dexterous manipulation of robots, Maud MARCHAL, Alexandre KRUPPA

10.3. Popularization

- Damien Marchal, Olivier Goury and Christian Duriez participated in "Fête de la science: Opération Chercheurs itinérants", which involves giving scientific lectures in middle and high schools.
- Olivier Goury presneted a tutorial for the "Journée de l'Enseignement de l'Informatique et de l'Algorithmique (Journée JEIA)", which is an event for high school teachers willing to learn more about computer science.
- Olivier Goury et Thomas Morzadec took part in the "Journée RIC (Recherche - Innovation - Créativité)", happening at IMT Lille Douai. A demonstration was made for students of engineering schools and the university of Lille.

10.3.1. Interventions

- National events: Fête de la Science: participations à l'opération "chercheur itinérant".

10.3.2. Creation of media or tools for science outreach

Développement du site hands-soft-robotics. <http://handsonsoftrobotics.lille.inria.fr/>

FLOWERS Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- PY. Oudeyer has been general co-chair (with J. Gottlieb, A. Shankar and P. Zurn) of the international conference "Curiosity: Emerging Sciences and Educational Innovations" at University of Pennsylvania, US, gathering researchers from multiple disciplines (neuroscience, psychology, artificial intelligence, HCI, robotics, philosophy, education) around the topic of curiosity, learning and education. <https://www.sp2.upenn.edu/sp2-event/curiosity-emerging-sciences-and-educational-innovations>.
- PY Oudeyer has been vice-chair of the IEEE CIS Technical Committee on Cognitive and Developmental Systems.

10.1.2. Scientific Events Selection

10.1.2.1. Conference Reviewer

- N. Diaz Rodriguez was reviewer for ICSC18 (International Conf. on Semantic Computing) and Artificial Intelligence and Knowledge Engineering Conference (IEEE AIKE 2018)
- O. Sigaud was reviewer for NIPS, ICLR and ICML 2018

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- PY. Oudeyer was associate editor of IEEE Transactions on CDS and Frontiers in Neurorobotics.

10.1.3.2. Reviewer - Reviewing Activities

- David Filliat was reviewer for Frontiers in Robotics and AI
- N. Diaz Rodriguez was reviewer for: Transactions on Emerging Telecommunications Technologies, Knowledge-Based Systems, Robotics and Autonomous Systems, IEEE Robotics & Automation Magazine, IEEE Transactions on Cognitive and Developmental Systems.
- PY Oudeyer was reviewer for Cognitive Science, Child Development Perspectives and Nature Scientific Reports.

10.1.4. Invited Talks

- David Filliat gave an invited presentation at 'Journées Robotique et IA' in PFIA18, on July 5th, 2018.
- PY Oudeyer, "Apprentissage autonome développemental et modèles du développement cognitif chez l'enfant", Paris, Académie des Sciences, Oct. 2018.
- PY Oudeyer, "Developmental Autonomous Learning: Can a Machine Learn like a Child?", Académie des Technologies, Paris, Oct. 2018
- PY Oudeyer, "Computational Theories of Curiosity-driven Learning: Cognitive Science and AI", Exploring Curiosity conference, Amsterdam, Nov. 2018.
- PY Oudeyer, "Developmental Autonomous Learning: Artificial Intelligence and Cognitive Sciences", Univ. Columbia, NY, Oct. 2018.
- PY Oudeyer, "Le projet KidLearn: motivations intrinsèques, apprentissage et edTech", Rectorat de l'Académie de Bordeaux, Bordeaux, Jan. 2018.

- PY Oudeyer, "Computational Theories of Curiosity-driven Development", Multidisciplinary Developmental Dynamics conference (ETF 18), University of East Anglia, UK, June 2018.
- PY Oudeyer, "Developmental Autonomous Learning: AI, Cognitive Science and Educational Technologies", joint lab Inria and Microsoft Research event, Paris, June 2018.
- PY Oudeyer, "Developmental Autonomous Learning: AI, Cognitive Science and Educational Technologies", Ubisoft, Paris, June 2018.
- PY Oudeyer, "Developmental Autonomous Learning: AI, Cognitive Science and Educational Technologies", Summer School on Human-Robot Interaction, Animatas project, Paris, sept. 2018.
- PY. Oudeyer, "Developmental exploration and active learning", Cloud Temple event on AI and machine learning, Paris, January 2018.
- PY Oudeyer, "From models of curiosity-driven learning to applications in Personalized eLearning technologies", international conference "Curiosity: Emerging Sciences and Educational Innovations" at University of Pennsylvania, US, Dec. 2018.
- PY Oudeyer, "Computational Theories of Curiosity-driven Learning", Symposium on the Biology of Decision Making (SBDM 2018), Ecole Normale Supérieure, Paris, June 2018.
- N. Diaz Rodriguez gave an invited talk at Inria Flowers Deep RL workshop 4/4/2018, Research seminar on State representation learning for robotics control at JRC Sevilla European Commission, Spain, 23 April 2018 ⁰
- N. Diaz Rodriguez gave an invited talk at Satellite workshop 24 May 2018 @ Sorbonne Université on Learning and decision-making at the interface between Neuroscience, Artificial Intelligence and Robotics. <http://sbdm2018.isir.upmc.fr/index.php?perma=1520611011>

10.1.5. Leadership within the Scientific Community

- PY. Oudeyer has been editor of the IEEE CIS Newsletter on Cognitive and Developmental systems, organizing two interdisciplinary dialogs, see <https://openlab-flowers.inria.fr/t/ieee-cis-newsletter-on-cognitive-and-developmental-systems/129>.

10.1.6. Scientific Expertise

- PY. Oudeyer has been a reviewer for the European Commission (FET program).
- D. Filliat has been a member of the ANR ASTRID evaluation committee.
- N. Diaz Rodriguez has been external expert reviewer for ANR-JST CREST IS 2018 program.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

ENSEIRB, 12h, Robotics project (Thibault Desprez)

IUT Informatique, 64h, IUT Informatique Bordeaux (Rémy Portelas).

Master: Robotique Mobile, 21 heures. M2, ENSTA - ParisTech (David Filliat).

Master: Perception pour la Robotique, 6 heures. M2, ENSTA - ParisTech (David Filliat).

Master: Perception pour la robotique, 12 heures. M2 Systemes Avances et Robotique, Sorbonnes University (David Filliat)

Master: Perception pour la Robotique Développementale, 3 hours, CogMaster (David Filliat)

Master: IN104 Projet Informatique, 20 h. TD (N. Diaz Rodriguez).

Master: IA301 (Telecom ParisTech): Logics and Symbolic Artificial Intelligence, 9h (N. Diaz Rodriguez)

⁰<https://ec.europa.eu/jrc/communities/community/event/research-seminar-natalia-diaz-rodriguez-ensta-paris-state-representation-learning>

Master: ROB313: Computer vision for autonomous systems, 8.5 h TD (Perception pour les Systèmes Autonomes, N. Diaz Rodriguez)

Master: Cours de robotique développementale, option robot, ENSEIRB (2h), PY. Oudeyer

10.2.2. Supervision

PhD in progress: Rémy Portelas, Intrinsically Motivated Goal Exploration in Open-Ended Worlds (Minecraft) (superv. P-Y. Oudeyer)

PhD in progress: Cédric Colas, Algorithms for Intrinsically Motivated Goal Exploration (superv. P-Y. Oudeyer)

PhD in progress: Sébastien Forestier, Models of curiosity-driven learning of tool use and speech development, started in sept. 2015 (superv. P-Y. Oudeyer)

PhD in progress: Thibault Desprez, Design and study of the impact of educational robotic kits in computer science education, started in dec. 2016 (superv. P-Y. Oudeyer)

PhD completed in 2018: Benjamin Clement, Intelligent Tutoring Systems, started oct 2015 (superv. Manuel Lopes and Pierre-Yves Oudeyer).

PhD completed in 2018: William Schueller, Study of the impact of active learning and teaching in naming games dynamics, started in sept. 2015 (superv. P-Y. Oudeyer)

PhD completed in 2018: Florian Golemo, Design and study of policy learning and Sim2Real transfer algorithms for robotics (superv. Pierre-Yves Oudeyer and Aaron Courville)

PhD completed: Baptiste Busch, Interactive Learning, started oct 2014 (superv. Manuel Lopes).

PhD completed in 2018: Alexandra Delmas, Auto-Apprentissage Auto-Adaptable pour la compliance au traitement, started oct 2014 (superv. Hélène Sauzéon and Pierre-Yves Oudeyer).

PhD completed in 2018: Adrien Matricon : Task dependent visual feature selection for optimising and generalizing robotics skills (superv. David Filliat, Pierre-Yves Oudeyer), defended June, 11th, 2018.

PhD in progress: José Magno Mendes Filho, Planning and control of an autonomous AGV in environment shared with humans, started Oct. 2015 (superv. David Filliat and Eric Lucet (CEA))

PhD in progress: Timothée Lesort, Incremental Deep Learning for Detection and Classification in a Robotic Context. started june 2017 (superv. David Filliat and Jean-Francois Goudou (THALES)).

PhD in progress: Vyshakh Palli Thazha, Data fusion for autonomous vehicles. started sept 2017 (superv. David Filliat and Hervé Illy (Renault)).

PhD in progress: Florence Carton, Exploration of reinforcement learning algorithms for drone visual perception and control started dec 2017 (superv. David Filliat and Jaonary Rabarisoa (CEA)).

PhD in progress: Hugo Caselles-Dupré, Incremental learning for sensori-motor control started june 2018 (superv. David Filliat and Michael Garcia-Ortiz (Softbank Robotics)).

10.2.3. Juries

David Filliat was in the PhD jury of François de la Bourdonnaye (18/12/18, Rapporteur), Arnaud Tanguy (28/11/18, Rapporteur), Dinesh Atchuthan (23/10/18, Examineur), Zhan Wang (19/10/18, Examineur), Quentin Bateux (12/02/18, Examineur), Clément Delgrange (reviewer).

David Filliat was in the Hdr jury of Sylvain Argentieri (06/12/18, Rapporteur)

PY Oudeyer was in the PhD jury of Héloïse Thero (ENS Paris, examiner), Matthieu Geisert (Univ. Toulouse, reviewer), Konstantinos Chatzilygeroudis (Univ. Lorraine, reviewer), Clément Delgrange (Univ. Dijon, examiner).

Thibault Desprez was in the internship jury at Enseirb Bordeaux in October 2018.

10.3. Popularization

10.3.1. Teaching and Education

10.3.1.1. Inirobot

IniRobot (a project done in collaboration with EPFL/Mobsya) aims to create, evaluate and disseminate a pedagogical kit which uses Thymio robot, an open-source and low cost robot, for teaching computer science and robotics.

IniRobot Project aims to produce and diffuse a pedagogical kit for teachers and animators, to help them and to train them directly or by the way of external structures. The aim of the kit is to initiate children to computer science and robotics. The kit provides a micro-world for learning, and takes an inquiry-based educational approach, where kids are led to construct their understanding through practicing an active investigation methodology within teams. See <https://dm1r.inria.fr/> or <http://www.inirobot.fr>.

Deployment: After 4 years of activity, IniRobot is used by more than 3000 adults, 30 000 children in France. Inirobot is also used in higher education, for example in Master 2 "Neurosciences, human and animal cognition" at the Paul Sabatier University in Toulouse. Inirobot is additionally used to train the management and elected officials of the Bordeaux metropolitan area (20 people). The digital mediators of the 8 Inria centers are trained to Inirobot and use it in their activities.

The project continues to be carried out in main collaboration with the LSRO Laboratory from EPFL (Lausanne) and others collaborations such as the French National Education/Rectorat d'Aquitaine, the Canopé Educational Network, the ESPE (teacher's school) Aquitaine, the ESPE Martinique, the ESPE Poitiers and the National Directorate of Digital Education.

Created pedagogical documents and resources:

- The inirobot pedagogical kit [83]: This pedagogical booklet provides activities scenarized as missions to do. An updated version of the Inirobot pedagogical kit is available at: <https://dm1r.inria.fr/uploads/default/original/1X/70037bdd5c290e48c7ec4cb4f26f0e426a4b4cf6.pdf>. Another pedagogical booklet has been also created by three pedagogical advisers for primary school, with pedagogical instructions and aims, under our supervision. The new pedagogical kit, "Inirobot Scolaire, Langages et robotique", which extends Inirobot to a full primary school approach is available at <http://tice33.ac-bordeaux.fr/Ecolien/ASTEP/tabid/5953/language/fr-FR/Default.aspx>
- Inirobot website and forum: <https://dm1r.inria.fr/> or <http://www.inirobot.fr> On this website, teachers, animators and general public can download documents, exchange about their use of inirobot's kit.

Inirobot activities are used by several projects: Dossier 123 codez from Main à la Pâte Fundation, Classcode project, ...

10.3.1.2. MOOC Thymio

Didier Roy played a central role in the design and making of The MOOC Thymio, released in october 2018, in collaboration with Inria Learning Lab and EPFL (Lausanne, Switzerland), on FUN platform and edX EPFL Platform), use Inirobot activities to teach how to use Thymio robot in education. Web: <https://www.fun-mooc.fr/courses/course-v1:inria+41017+session01/about>

10.3.1.3. Poppy Education

As part of the Poppy Education project, thanks the robotic platform Poppy we created pedagogical kits open-source and low cost for teaching computer science and robotics. It is designed to help young people to take ownership with concepts and technologies of the digital world.

The Pedagogical kits includes robots and pedagogical resources. They have been co-created directly with users (mainly high schools teachers) and evaluated in real life by experiments in classrooms [120].

The activities were designed with the visual programming language Snap! (Scratch like) and Python, but some are in Java / Processing (thanks the robot API you can use the language of your choice).

Most activities are using the robot Poppy Ergo Jr, but some use Poppy Torso (mostly in higher school because of its cost) and Poppy Humanoid (in kinder-garden for dance projects) :

- The Poppy Ergo Jr robot is a small and low cost 6-degree-of-freedom robot arm. It consists of simple shapes which can be easily 3D printed. It has several 3D printed tools extending its capabilities (there are currently the lampshade, the gripper and a pen holder but you can design new ones). They are assembled via rivets which can be removed and added very quickly with the OLLO tool. Each motor has LEDs on (8 different color can be activated). The electronic card (raspberry Pi) is visible next to the robot, that allow to manipulate, and plug extra sensors.

- The Poppy Torso robot is an open-source humanoid robot torso which can be installed easily on tabletops. More affordable than the robot Poppy Humanoid, it is an ideal medium to learn science, technology, engineering and mathematics.

We continued to improve the robots functionalities and you can see below the resources we created :

- A website have been created to present the project and to share all resources and activities.
<https://www.poppy-education.org/>
- To complete the pedagogical booklet [119] that provides guided activities and small challenges to become familiar with Poppy Ergo Jr robot and the Programming language Snap! (<https://drive.google.com/file/d/0B2jV8VX-1QHwTUxXZjF3OGxHVGGM/view>) we provided a list of Education projects. Educational projects have been written for each activity carried out and tested in class. So each projects have its own web page including resources allowing any other teacher to carry out the activity (description, pedagogical sheet, photos / videos, pupil's sheet, teacher's sheet with correction etc.). There is now 32 activities documented available on Poppy Education website.

You can see the activities on this links (in french):

- Introduction to Ergo Jr and Snap! :
<https://www.poppy-education.org/activites/initiation-ergo-jr-et-snap>
- Ergo Jr and Python tutorials :
<https://www.poppy-education.org/activites/tuto-python-robot-ergojr>
- High-school levels :
www.poppy-education.org/activites/activites-lycee
- Middle-school level :
www.poppy-education.org/activites/activites-college
- Primary Schools level :
<https://www.poppy-education.org/activites/activites-primaire/>
- Demonstrations (just videos to show the possibilities) :
<https://www.poppy-education.org/activites/demos/>
- We continued to improve the documentation of the robotic platform Poppy (<https://docs.poppy-project.org/en/>) and the documentation has been translated into French (<https://docs.poppy-project.org/fr/>).
- A FAQ have been written with the most frequents questions to help users: <https://www.poppy-education.org/aide/>
- New activities on Poppy Education website and forum.
- New section : Activities with Python.
- Improvements in the Resources page of the Poppy Education website.

10.3.2. Talks and Hands-on

- Thibault Desprez, December 2018 at Inria Bordeaux, welcomed three students from middle-school during two days to discover the working environment and to introduce them to robotics.
- Thibault Desprez, Inria Bordeaux open day, November 2018, exhibition stand to present Poppy Education and Poppy robots
- Thibault Desprez, National Meeting of Educational Robotics, October 2018 at ifé ENS Lyon, two talk to present Poppy robots kits in school.
- Thibault Desprez, National Meeting of Educational Robotics, October 2018 at ifé ENS Lyon, exhibition stand to present Poppy Station and Poppy robots.
- Thibault Desprez, Théo Segonds, Fête de la science (Inria Bordeaux Sud-Ouest), October 2018, 4 programming workshop in 2 days (with middle school students) using Snap! and the robot Poppy Ergo Jr.
- Thibault Desprez, Meet-up & Educate, October 2018 at INP Bordeaux, exhibition stand to student recruitment for a project on Poppy robots.
- Thibault Desprez, PI space inauguration, July 2018 at ESPE Mérignac, exhibition stand to present Poppy Station and Poppy robots.
- Thibault Desprez, Bordeaux Geek Festival, May 2018, Parc expo, Talk about societal problem on robotics.
- Thiabult Desprez, Usine Végétale inauguration, May 2018 at Le Fieu, exhibition stand to present Poppy Education and Poppy robots in rural zone.
- Thibault Desprez, Connect'houars, April 2018 at Talence, Workshops to initiate in programming.
- Thibault Desprez, Didapro 7, February 2018 at HEP Vaud, Lausanne, talk to present the article : "Poppy Ergo Jr : un kit robotique au coeur du dispositif Poppy Éducation"
- Thibault Desprez, Théo Segonds, Fondation Main à la pate, February 2018 at Paris, Two days to train a group of teachers to robotics and programmation with Poppy Ergo Jr robot.
- Thibault Desprez, e-Fran seminar, January 2018 at Minister of Higher Education, Research and Innovation, poster to present my thesis.
- Théo Segonds. Poppy Ergo Jr Workshop at CERN (Geneve). Construction and programming of the robotic arm Poppy Ergo Jr.
- Théo Segonds. Scientae Robotica, Lausanne. Poppy Ergo Jr Workshop. Construction and programming of the robotic arm Poppy Ergo Jr.
- Benjamin Clement and Alexandra Delmas, EdTech days, may 2018. Presentation of kidlearn and kidbreath projects.
- Theo Segonds, Didier Roy. PLAIRE Festival in Evian with Poppy exhibition during 2 days.
- Alexandra Delmas, Didier Roy. Forum Educavox in Bordeaux. Presentation of kidlearn and kidbreath projects.
- Didier Roy. R2T2 Richter event, remote robotics programming, in caribbean islands, in collaboration with EPFL.
- Didier Roy. Inria Scientific Days, presentation of educational projects in Flowers Team.
- Stephanie Noirpoudre. Poppy Education présent à la journée EIDOS 65 : Le forum des pratiques numériques pour l'éducation. Description and feedback of the 9th edition of the EIDOS 65 day (the digital practice forum for education).
- PY Oudeyer mentored students from College de Cadillac for their robotics project (2 days), march 2018.
- PY Oudeyer gave a talk "Intelligence artificielle: un outil pour nous aider à mieux comprendre l'intelligence naturelle?" at Collège Cadillac, Gironde, may 2018.

- PY Oudeyer gave a talk "Intelligence artificielle: apprentissage automatique et sciences cognitives" at a training event for members of Bordeaux Metropole political and decision staff, Nov. 2018.
- PY Oudeyer gave a talk "Intelligence artificielle: apprentissage automatique et sciences cognitives" at Université de Tous les Savoirs, Arcachon, janv. 2018.

10.3.3. Popularizing inside Inria

- Théo Segonds and Thibault Desprez. Poppy Ergo Jr training for Inria Scientific Mediation members.
- Inria National Scientific Mediation Seminar: Presentation by Stéphanie Noirpoudre and Théo Segonds of Poppy Ergo Jr, and workshop.
- Sébastien Forestier made a presentation on models of curiosity-driven development at Unithé ou Café.

10.3.4. Innovation and transfer

- Since 1 september 2017 until february 2019, PerPoppy and Poppy Station Projects : D. Roy, P.-Y. Oudeyer. These projects aim to perpetuate the Poppy robot ecosystem by creating an external structure from outside Inria, with various partners. After the Poppy Robot Project, the Poppy Education Project has ended and Poppy Station structure is born. Many exchanges have already taken place with potential partners such as the EPFL, the ENSAM network, the «Ligue de l'Enseignement», Génération Robots, the French Institute of Education, several academies, the direction of digital education of the Ministry of Education, ... PerPoppy is the project which is building the new structure, and Poppy Station is the name of the new structure. Poppy Station, which includes Poppy robot ecosystem (hardware, software, community) from the beginning, is a place of excellence to build future educational robots and to design pedagogical activities to teach computer science, robotics and Artificial Intelligence. <https://www.poppystation.org>

10.3.5. Internal or external Inria responsibilities

D. Roy is member of the Class'code team (Inria is member of the consortium of this project) <https://pixees.fr/classcode/accueil/>. Class'code is a blended formation for teachers and animators who aim to initiate young people to computer science and robotics. D. Roy has in charge the robotics module of the project.

D. Roy is adviser of the organization of computer science exhibition in "Palais de la découverte" which has begun on 2018 March. He helps for robotics part.

D. Roy is member of the team "Education en Scène" which organize educational activities with robotics in Bordeaux Digital City.

D. Roy is member of the scientific committee of "Learning Computer Science at School" project in Canton de Vaud (Switzerland).

D. Roy is member of the Robocup Junior French committee, an international robotics challenge <http://rcj.robocup.org/>.

D. Roy is member of the scientific committee of "Ludovia CH" Conference which will be held in Yverdon (Switzerland) on 2019 March.

D. Roy is project co-leader of MOOC Thymio, in collaboration with EPFL and Inria Learning Lab. The aim of this MOOC is to propose to teachers a training on basics of computer science, using the robotic platform Thymio.

D. Roy is associate member of the EPFL "LEARN" center.

PY. Oudeyer continued to be the PI of the Poppy Education project.

PY. Oudeyer was scientific mentor for students of Collège de Cadillac, within the program "Main à la pâte" of Maison des Sciences.

10.3.6. Articles and contents

- Adrien Laversanne-Finot wrote a blog post on "Discovery of independently controllable features through autonomous goal setting", <https://openlab-flowers.inria.fr/t/discovery-of-independently-controllable-features-through-autonomous-goal-setting/494>
- Cédric Colas wrote a blog post on "How Many Random Seeds Should I Use? Statistical Power Analysis in (Deep) Reinforcement Learning Experiments", <https://openlab-flowers.inria.fr/t/how-many-random-seeds-should-i-use-statistical-power-analysis-in-deep-reinforcement-learning-experiments/457>
- Cédric Colas wrote a blog post on "Bootstrapping Deep RL with population-based diversity search"
- PY Oudeyer was interviewed for an article of **The Economist** on curiosity-driven learning, <http://www.pyoudeyer.com/TheEconomist2018.pdf>
- PY Oudeyer was interviewed for an article of **Scientific American** on curiosity-driven learning, <http://www.pyoudeyer.com/IntelligentMachinesThatLearnLikeChildren-Scientific%20American2018.pdf>
- PY Oudeyer was interviewed for an article of **MIT Technology Review** on curiosity-driven learning, <http://www.pyoudeyer.com/may17MITTechnology%20Review.pdf>

HEPHAISTOS Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation, Steering committees

- J-P. Merlet is a permanent member of the International Steering Committee of the IROS conference, of the CableCon conference and chairman of the scientific Committee of the Computational Kinematics workshop,
- Y. Papegay is a permanent member of the International Steering Committee of the International Mathematica Symposium conferences series.

10.1.2. Reviewing

- The members of the team reviewed numerous papers for numerous international conferences and journals

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- J-P. Merlet is board member of the Journal of Behavioral Robotics
- E. Wajnberg is Editor-in-Chief of the journal BioControl, a board member of the journals Entomologia Experimentalis et Applicata, Neotropical Entomology, Applied Entomology and Zoology and Journal of Economical Entomology

10.1.4. Invited Talks

- J-P. Merlet has given a talk on parallel robots at the workshop “Rigidity theory for multi-agent systems meet parallel robotics”, Nantes, a talk on interval analysis at SCAN, Tokyo and a talk on bibliometric indicators at the SIF workshop
- E. Wajnberg has been invited for talks by the University of Palermo (Italy, February), the University of Haifa (Israel, March), the conference “l’Ere du Temps” (Nice, June), the European Congress of Entomology, Naples (Italy, July), and the University dell’Insubria (Varese, Italy, November).

10.1.5. Leadership within the Scientific Community

- J-P. Merlet is Inria representative to the PPP Eurobotics aisbl. He is a member of the IFToMM (International Federation for the Promotion of Mechanism and Machine Science) Technical Committees on History and on Computational Kinematics and is one of the 10 elected members of IFToMM Executive Council, the board of this federation. He is a member of the scientific committee of the CNRS GDR robotique. J-P. Merlet is an IEEE Fellow, doctor honoris causa of Innsbruck University and IFToMM Awards of Merits
- Y. Papegay is a member of the OpenMath Society, building an extensible standard for representing the semantics of mathematical objects.

10.1.6. Scientific Expertise

- J-P. Merlet was involved in project evaluations for several foreign funding agencies (Israel, Austria, ERC). He was also appointed as *Nominator* for the Japan’s Prize.
- E Wajnberg is involved in project evaluation for several foreign funding agencies (Belgium, Italy).
- E. Wajnberg was invited to be a committee member for recruiting an Institute Director by the CNR (Rome, Italy).

10.1.7. Research Administration

- J-P. Merlet is an elected member of the Academic Council of UCA COMUE, a corresponding member of Inria ethical committee (COERLE) and member of the Research, Ethical Committees of UCA. He is an elected member of Inria Scientific Committee and of the “Commission Administrative Paritaire” of Inria
- Y. Papegay is a member of the CUMIR (the committee managing the interaction between researchers and the computer support staff)
- O. Pourtallier is a board member of SeaTech, an Engineering School of University of Toulon. She is responsible of the NICE committee (long term invited scientists and post-doctoral student selection) and a member of the CGL AGOS

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

In February, Y. Papegay has been visiting lecturer of University of French Polynesia, where he gave an object oriented programming course.

O. Pourtallier lectured 6 hours on game theory to Master OSE (M2), at École des Mines de Paris, Sophia Antipolis, France

E. Wajnberg has taught one week course (about 30 h) about the use of the R program and statistics for PhD students and senior scientists in Rehovot (Israel, March), and another week with the same teaching program in Piracicaba (Brazil, July).

10.2.2. Supervision

PhD : A. Massein, Design of Instrumented Environment for Human Monitoring, defended in november 2018, supervisor: Y.Papegay.

PhD in progress: W. Plouvier. Improving pest control efficiency: a modelling approach (2015-2019). Supervisor: E. Wajnberg.

10.2.3. Juries

- J-P. Merlet has been a member of four PhD juries. He was also president of the jury for the Best PhD thesis award of the robotics GDR. He is a member of the “Comité de Suivi Doctoraux” (preliminary evaluation committee of PhD students) of Dayan Hassan (project team Chorale) and of Matheuse Laranjeira (Toulon University).
- E. Wajnberg has been a member of one PhD jury.

10.3. Popularization

10.3.1. Articles and contents

- J-P. Merlet has given two interviews at Nice-Matin and is a member of the scientific committee for the preparation of a permanent robotics exhibition at Cité des Sciences et de l’Industrie, Paris

10.3.2. Education

- Y.Papegay is actively participating to the Math.en.Jeans initiative for Mathematics teaching for undergraduate students. He is developing several pedagogical resources based on small robotics devices at high-school level. He has organized and animated summer schools in experimental mathematics and computer sciences. Several one week sessions have been held in Oxford in June, July, August and November gathering more than 70 high-school students - most of them were awardees in Mathematics Olympiads.
- O. Pourtallier is corresponding researcher for two MATH.en.JEANS workshops, an initiative for Mathematics teaching for undergraduate students.

10.3.3. Interventions

- J-P. Merlet and Y. Papegay have meet several schoolchildren (3ème)
- J-P. Merlet has given a talk during the Art'DI (a meeting between handicapped people and artists) day at Cannes
- J-P. Merlet and E. Wajnberg have given two talks in the framework of “Science pour tous”

10.3.4. Internal action

- J-P. Merlet has given a talk at Café Techno and at Café ADSTIC (for local PhD students), has invited Nathalie Rochet, a member of south-east CPP to give a talk at a Café-In

10.3.5. Creation of media or tools for science outreach

- the Hephaistos team proposes simple cable-driven parallel robots that are used to illustrate scientific concepts such as showing what is a sinus, instantiating the geometrical definition of an ellipse

LARSEN Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General chair, scientific chair

- Co-organized the French days for Humanoid Robotics (JNRH – “Journées Nationales de la Robotique Humanoïde”), sponsored by the GT7 of the GDR Robotics [Serena Ivaldi, Karim Bouyarmane, Pauline Maurice, Jean-Baptiste Mouret, François Charpillet]
- Co-organized an international workshop at IROS 2018 (*Assistance and Service Robotics in a Human Environment*) [Francis Colas]
- Co-organized an international workshop at IEA 2018 (*Collaborative Robotics and Ergonomics*) [Pauline Maurice, Serena Ivaldi]

10.1.1.2. Member of the Organizing Committees

- Publicity chair for IEEE ARSO 2018 (Advances in Robotics and its Social Impact) [Serena Ivaldi]
- Co-organized the JFPDA2018 (“Journées Francophones sur la Planification, la Décision et l’Apprentissage pour la conduite de systèmes”) [Vincent Thomas]
- Co-organized the Robotics and Artificial Intelligence day at the JFPDA 2018 [Serena Ivaldi]

10.1.2. Special issues

- Co-edited a special issue about “Human-Robot Interaction” in ERCIM News [Serena Ivaldi].

10.1.3. Scientific Events Selection

10.1.3.1. Member of the Conference Program Committees

- Associate Editor for IEEE Humanoids 2018 [Serena Ivaldi]
- Robotics Science and Systems (RSS) [Serena Ivaldi]
- ALIFE 2018 (European Conference on Artificial Life) [Amine Boumaza, Jean-Baptiste Mouret]
- EVO* 2018 (EvoStar) [Jean-Baptiste Mouret]
- GECCO2018 (Genetic and Evolutionary Computation Conference) [Amine Boumaza, Jean-Baptiste Mouret]
- CEC 2018 (Congress on Evolutionary Computation) [Amine Boumaza]
- ICAART 2018(International Conference on Agents and Artificial Intelligence)[François Charpillet]
- IJCAI-ECAI 2018 (International Joint Conference on Artificial Intelligence and European Conference on Artificial Intelligence [François Charpillet]
- AAAI 2019 (AAAI Conference on Artificial Intelligence) [François Charpillet]

10.1.3.2. Reviewer for Peer-reviewed Conferences

- CoRL (Conference on Robot Learning) [Jean-Baptiste Mouret, Konstantinos Chatzilygeroudis]
- ICRA 2019 (2019 IEEE International Conference on Robotics and Automation) [Karim Bouyarmane, Francis Colas, Serena Ivaldi, Jean-Baptiste Mouret]
- IJCAI ECAI 2018 (27th International Joint Conference on Artificial Intelligence and the 23rd European Conference on Artificial Intelligence) [Francis Colas, Vincent Thomas]
- IROS 2018 (IEEE/RSJ International Conference on Intelligent Robots and Systems) [Karim Bouyarmane, Francis Colas, Jean-Baptiste Mouret]

- HUMANOIDS 2018 (IEEE/RSJ International Conference on Humanoid Robots) [Francis Colas]
- IEEE ARSO 2018 (Advanced Robotics and its Social Impact) [Serena Ivaldi]

10.1.4. Journal

10.1.4.1. Member of the Editorial Boards

- IEEE Robotics and Automation Letters [Serena Ivaldi, associate editor]
- Frontiers in AI and Robotics [Amine Boumaza, Serena Ivaldi, Jean-Baptiste Mouret]

10.1.4.2. Reviewer - Reviewing Activities

- Journal of Field Robotics [Francis Colas]
- Robotics and Automation Letters [Francis Colas]
- IEEE Robotics and Automation Letters [Jean-Baptiste Mouret, Serena Ivaldi]
- IEEE Transactions on Robotics [Serena Ivaldi]
- Autonomous Robots [Serena Ivaldi]
- CEAS Aeronautical Journal [Alexis Scheuer]

10.1.5. Scientific expertise

- Serena Ivaldi evaluated a project for the Université Libre de Bruxelles.

10.1.6. Invited Talks

- Jean-Baptiste Mouret gave a keynote at the CONTROLO 2018 conference (13th APCA International Conference on Automatic Control and Soft Computing, in Ponta Delgada, São Miguel Island, Azores, Portugal), and invited talks at the IEEE ICRA 2018 workshop “Self-healing, Growing and Evolving Soft Robots” (Brisbane, Australia), the IEEE ICRA 2018 workshop “Autonomous Robot Design”, the Frontiers Research and Artificial Intelligence Workshop organized by the ERC (Bruxelle, Belgium), the German-French Conference on Humanoids and Legged Robots (Munich, Germany), the French Academy of Science and Leopoldina symposium “Data Science versus Motion Intelligence” (Paris, France), the Workshop on Learning Applications for Intelligent Autonomous Robots organized at the IAS 15 Conference (Baden Baden, Germany), as well as at Uber AI labs (San Francisco, California), the Advanced Telecommunications Research (ATR, near Kyoyo, Japan), and Safran R&D (Saclay, France).
- Serena Ivaldi gave an invited talk at the Workshop on Learning Applications for Intelligent Autonomous Robots organized at the IAS 15 Conference (Baden Baden, Germany) and at the atelier santé of the Journée Federation Charles Hermite (Nancy).
- Adrien Malaisé gave an invited talk at IEEE ARSO 2018 (Genova, Italy).

10.1.7. Research administration

- Francis Colas is member of the local commissions:
 - “Commission des Utilisateurs des Moyens Informatiques” (CUMI),
 - “Commission de Développement Technologique” (CDT),
 - “Comité du Centre Inria Nancy Grand-Est”,
 - “bureau de la Commission de la Mention Informatique” (CMI) of the IAEM doctoral school.
- Serena Ivaldi was a member of the committee for the researcher selection at Inria Nancy Grand Est (Jury CR),
- François Charpillat was a member of the committee for professor selection at Université Technologique de Troyes (PR LM2S No 4049 “Traitement du signal”),
- François Charpillat was a member of the HCERES committee for U2IS,

- François Charpillet is member of the scientific council of the GDR Robotics.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Master: Pauline Maurice, “Analyse du comportement”, 16 eq. TD, M2 “Sciences Cognitives”, Univ. Lorraine, France

Master: Francis Colas, “Robotique Autonome”, 18h eq. TD, M2 “Systèmes Interactifs et Robotiques”, CentraleSupélec, France.

Master: Francis Colas, “ROS”, 6h eq. TD, M1, Mines de Nancy, France.

Master: Francis Colas, “Planification de trajectoires”, 12h eq. TD, M2 “Apprentissage, Vision, Robotique”, Univ. Lorraine, France.

Master : Vincent Thomas, “Apprentissage numérique”, 15h eq. TD, M2, Université de Lorraine, France.

Master : Vincent Thomas, “Optimisation et métaheuristique”, 15h eq. TD, M1, Université de Lorraine, France.

Master : Vincent Thomas, “Game Design”, 16h eq. TD, M1, Université de Lorraine, France.

Master : Vincent Thomas, “Agents intelligents et collectifs”, 16h eq. TD, M1, Université de Lorraine, France.

Master : Vincent Thomas, “Serious Game”, 12h eq. TD, M2, Université de Lorraine, France.

Master : Alexis Scheuer, “Vie artificielle”, 22,5h eq. TD, M2, CentraleSupélec, France.

Master : Alexis Scheuer, “Introduction à la robotique mobile”, 30h eq. TD, M1, Université de Lorraine, France.

Master : Alexis Scheuer, “Boucle sensori-motrice et comportement autonome”, 15h eq. TD, M2, Université de Lorraine, France.

Master : Alexis Scheuer, “Modélisation et commande en robotique”, 16h eq. TD, M2, Université de Lorraine, France.

10.2.2. Supervision

PhD: Konstantinos Chatzilygeroudis, 14 Dec. 2018, “*Micro-Data Reinforcement Learning for Adaptive Robots*”, started in Oct. 2015, Jean-Baptiste Mouret (advisor).

PhD: Oriane Dermay, 17 Dec. 2018, “*Prédiction de l'intention: du geste au mouvement corps complet*”, started Oct. 2015, François Charpillet (advisor), Serena Ivaldi

PhD in progress: Waldez Avedo Gomes Junior, “*Intelligent Collaboration between Humans and Robots*”, started in Oct. 2018, Jean-Baptiste Mouret (advisor), Serena Ivaldi

PhD in progress: Rituraj Kaushik, “Fast adaptation to damage by exploiting trajectory data”, started in Oct. 2016, Jean-Baptiste Mouret (advisor).

PhD in progress: Adam Gaier, “*Optimisation aerodynamic design through illumination of surrogate models*”, started in June 2017, Jean-Baptiste Mouret (advisor), Alexander Asteroth.

PhD in progress: Vladislav Tempez, “*Apprentissage data-efficace de lois de commandes pour robots volants*”, started in Sept. 2018, Jean-Baptiste Mouret (advisor).

PhD in progress: Adrien Malaisé, “*Capteurs portés dans la robotique collaborative : de l'apprentissage du mouvement humain à l'acceptabilité de cette technologie*”, started in January 2017, Francis Colas (advisor), Serena Ivaldi.

PhD in progress: Jérôme Truc, “*Apprentissage de comportement et interactions prédictives pour un robot d'assistance en environnement structuré*”, started in September 2018, Francis Colas (advisor).

PhD in progress: Yassine El Khadiri, “*Apprentissage automatique pour l’assistance à l’autonomie à domicile*”, started in September 2018, François Charpillet(advisor).

PhD in progress: Eloise Zehnder, “*Interaction entre technologie et personnes âgées : adaptabilité et acceptabilité des technologies d’assistance (AT) à domicile*”, François Charpillet, Jérôme Dinet (advisors).

10.2.3. Juries

- Francis Colas was a reviewer for the PhD of Marie-Lou Barnaud (Univ. Grenoble Alpes).
- Serena Ivaldi was a reviewer for the PhD of Pavan Kanajar (Italian Institute of Technology, Italy).
- François Charpillet was a reviewer for the PhD of Nicolas Duminy (Univ. Bretagne Sud),
- François Charpillet was a reviewer for the PhD of Aurélien Massein (Univ. Côte d’Azur),
- François Charpillet was a reviewer for the PhD of Jules Waldhart (Univ. Fédérale Toulouse Midi-Pyrénées),
- François Charpillet was a reviewer for the PhD of Farhood Negin (Univ. Côte d’Azur),
- François Charpillet was a reviewer for the PhD of Mathieu Lelerre (Univ. Normandie),
- François Charpillet was a reviewer for the HDR of Dominique Vaufreydaz (Univ. Grenoble Alpes).

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- Amine Boumaza is a member of the editorial board of “Interstice”.

10.3.2. Articles and contents

- Jean-Baptiste Mouret gave interviews for France Culture (radio), France 3 Lorraine (TV), and Socialter (printed magazine)
- François Charpillet gave an interview which gave an article on Re.Med. La revue de la Recherche Médicale du CHRU de Nancy.

10.3.3. Education

- Vincent Thomas was member of the organization comitee of the “24h des DUT informatique” event (Nancy, 2018) and organized the Artificial Intelligence competition during the event (218 students from 25 DUT of computer science).
- Serena Ivaldi is in the scientific committee for the robotics exhibition at the “Cité des sciences et de l’industrie” in Paris (starting in April 2019).
- Serena Ivaldi presented our activities in robotics at the Lycée Henri Loritz in Nancy

10.3.4. Interventions

- Public workshop on robot programming with Thymio for the Ada Lovelace Day [Alexis Scheuer]
- Public workshop on robot programming with Thymio at “Fête de la Science” [Alexis Scheuer, Olivier Rochel, Francis Colas]
- The team showed demonstrations for the Ada Lovelace Day (around 20 female students)
- Participated to a panel at the “Forum des Sciences Cognitives” (Nancy, France) [Jean-Baptiste Mouret]
- Tutorials on “physics simulation” and “path planning” for teachers during “journées ISN-EPI” (Nancy, France) [Vincent Thomas]

10.3.5. Internal action

- Jean-Baptiste Mouret gave a talk for the Colloquium organied by LORIA

PERSASIVE Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- Sabine Coquillart was Conference co-chair for ICAT-EGVE 2018, Cyprus, Nov. 7-9, 2018.

10.1.1.2. Chair of Conference Program Committees

- Thierry Fraichard was Program Co-Chair for the IEEE Int. Conf. on Simulation, Modeling, and Programming for Autonomous Robots (SIMPAN), Brisbane (AT), May 2018.

10.1.1.3. Member of Conference Program Committees

- Patrick Reignier was a member of the Program Committee of Smart Objects 2018 (satellite workshop to CHI 2018, Montreal (CA)).
- Eric Castelli: co-organisator and "board member" of the international conference serie STLU'xx (Spoken Language Technologies for Under-resourced languages) since its creation. For 2018: participation of SLTU'18 (Gurugam, India) (as reminder: SLTU'16 (Jakarta, Indonesia) - SLTU'14 (St Petersburg, Russia) - SLTU'12 (Cape Town, South Africa) - STLU'10 (Penang, Malaysia) - Organisator and "co-chair" of the first edition STLU'08 (Hanoi, Vietnam))
- Sabine Coquillart was a member of the Program Committee for 3DCVE'18, CENTRIC'18, GRAPP'18, ICGI'18, ICMI'18, IEEE VR'18 Journal Papers, IEEE VR'18 Conference Papers, ICAT-EGVE'18, VRST'18, WSCG'18,

10.1.1.4. Reviewer

- Thierry Fraichard reviewed papers for the IEEE/RSJ IROS conference.
- Patrick Reignier reviewed papers for Smart Objects 2018.
- Dominique Vaufreydaz reviewed articles for IV2018, IUadapt2018, RO-MAN2018, ICARCV2018, AVEC2018, Workshop on Modeling Cognitive Processes from Multimodal Data at ICMI 2018, HRI 2019, MAPR2018.
- Eric Castelli reviewed papers of 14 international conferences and workshops: SPIN 2018 (Noida, Dehly, India) - 3ICT18 (Bahrain) – IALP 2018 (Bandung, Indonesia) – NICS 2018 (Ho Chi Minh City, Vietnam) - SCS 2018 (Bahrain) – SPECOM 2018 (Leipzig, Germany) – SigTelCom 2018 (Ho Chi Minh City, Vietnam) - STLU'18 (Gurugram, India) – ATC 2018 (Ho Chi Minh City, Vietnam) – ICVES 2018 (Madrid, Spain) – SCS 2019 (Bahrain) – SigTelCom 2019 (Hanoi, Vietnam) – ICMSAO 2019 (Bahrain) – SPECOM 2019 (Istanbul, Turkey) – MAPR 2019 (Ho Chi Minh City, Vietnam)
- James Crowley Reviewed papers for ACCV 2018, ICMI 2019, and CVPR 2018.
- Sabine Coquillart Reviewed papers for Eurographics'18, Eurohaptics'18.

10.1.2. Journal

10.1.2.1. Member of the Editorial Boards

- Sabine Coquillart is a member of the Scientific Committee of the Journal of Virtual Reality and Broadcasting.
- Sabine Coquillart is Academic Editor for PeerJ Computer Science Journal.
- Sabine Coquillart is Review Editor for Frontiers in Virtual Environments Journal.

- Sabine Coquillart is Associate Editor for Presence: Teleoperators and Virtual Environments.
- Thierry Fraichard is an Associate Editor for IEEE Robotics and Automation Letters (RA-L).
- Patrick Reignier is a member of the editorial board of the Modeling and Using Context Journal.
- Patrick Reignier served as a guest editor for a special issue of the Revue d'Intelligence Artificielle on Smart Homes.
- Dominique Vaufreydaz served as a guest editor for a special issue Special Issue "Human Behavior, Emotion and Representation" of Multimodal Technologies and Interaction.

10.1.2.2. Reviewer - Reviewing Activities

- Thierry Fraichard reviewed articles for IEEE Trans. Intelligent Vehicles (TIV), IEEE Robotics and Automation Letters (RA-L).
- Thierry Fraichard reviewed proposals for the IDEX Université Grenoble Alpes and the Italian Research Agency.
- Thierry Fraichard served as a reviewer for the H2020 ILIAD European project.
- Eric Castelli reviewed article for the "Romanian Human Computer Interaction" Journal (RRIOC)
- Dominique Vaufreydaz reviewed articles for the journal of Interactive Technology and Smart Education

10.1.3. Invited Talks

- Eric Castelli: *The future of scientific international cooperation in ASEAN area*. Seminar of International Research Institute MICA, Hanoi, Vietnam, 9 & 10 July 2018
- James Crowley: *Put That There: 30 Years of Research on Multi-Modal Interaction*, Invited Plenary Presentation, 2018 International Conference on Multimodal Interaction, ICMI 2018, Boulder Co. 16 Oct 2018.
- James Crowley: *Artificial Intelligence*, Invited Plenary Presentation, 2018 Colloque annuel des directeurs des écoles d'ingénieurs, Marseilles, 31 May 2018.
- Sabine Coquillart: *Pseudo-haptics : résultats de recherche et perspectives d'applications*, Invited presentation, Séminaire "Sensorimotricité, intersensorialité et réalité virtuelle", Grenoble, 28 janvier 2018.

10.1.4. Leadership within the Scientific Community

- James Crowley is a member of the Steering Committee for the ACM Int. Conf. on Multimodal Interaction.
- Sabine Coquillart is serving as member of the steering committee for the ICAT Int. Conf. on Artificial Reality and Telexistence.
- Sabine Coquillart is chairing the steering committee for the EGVE Working Group – EUROGRAPHICS Working group on Virtual Environments.
- Sabine Coquillart is an elected member of the EUROGRAPHICS Executive Committee.
- Sabine Coquillart is a member of the EUROGRAPHICS Working Group and Workshop board.

10.1.5. Scientific Expertise

- James L. Crowley served on the ANR committee CE 33 Interaction, Robotics.
- Sabine Coquillart served as an expert reviewer for the Austrian Science Fund.
- Thierry Fraichard served as an expert reviewer for the European Commission and the Italian Research Agency.
- Patrick Reignier is a member of the Scientific Council of the Amiqua4Home EquipEx.
- Dominique Vaufreydaz served as an evaluator for Initiatives de Recherche Stratégiques (IRS) call of the Grenoble Idex.

- Dominique Vaufreydaz served as an evaluator for Icelandic Research Fund.
- Eric Castelli served as an international expert for the Vietnamese agency NAFOSTED (National Foundation for Science and Technology Development), Ministry of Science and Technology of Vietnam.
- Eric Castelli served as an international expert for the Cambodian Ministry of Posts and Telecommunications
- Sabine Coquillart served as member for the Best Paper Award Committee for IEEE VR 2018.
- Sabine Coquillart served as a member of the Scientific Committee of "Challenges of IoT in the Digital Tools and Uses Congress", 2018.

10.1.6. Research Administration

- James Crowley is director for the Amiqua4Home Innovation Platform (EquipEx).
- James Crowley serves on the Administrative Committee (Bureau) for the Laboratoire Informatique de Grenoble.
- James Crowley served on the Scientific Committee (CoS) for the CRI Inria Grenoble-Rhone Alpes.
- James Crowley served on the orientation committee for the Competitvity Pole Minalogic
- Patrick Reignier is head of the engineering support group of the Laboratoire d'Informatique de Grenoble (13 members). He is currently supervising the moving of the Domus Living lab to a new site on Campus.
- Patrick Reignier serves on the Administrative Office (Bureau) for the Laboratoire Informatique de Grenoble.
- Patrick Reignier is at the head of the Domus Living Lab
- Patrick Reignier is a member of the Comité Executif of the Amiqua4Home Equipex
- Patrick Reignier is a member of the Comité de pilotage of the MACI (Maison de la Création et l'Innovation)

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

10.2.1.1. James Crowley

James Crowley was co-director of the Master of Science in Informatics at Grenoble (MoSIG) to Sept 2018.

Master : Computer Vision, Course 27h EqTD, M2 year, Master of Science in Informatics at Grenoble

Master 1: Intelligent Systems, Cours 54h EqTD, UFRIM2AG

ENSIMAG 2: Intelligent Systems, Cours 54h EqTD, ENSIMAG

ENSIMAG 3 : Pattern Recognition and Machine Learning, Cours 27h EqTD, ENSIMAG

10.2.1.2. Patrick Reignier

- Patrick Reignier has been elected member of the Conseil des Etudes et de la Vie Universitaire of Grenoble INP
- Patrick Reignier was a member of the consultation group for the proposal of the founding text for the integrated university.
- Patrick Reignier has been nominated as a member of the Conseil de la Formation Continue de Grenoble INP
- Patrick Reignier participated in the editing of a successful IDEX Educational program proposal "FromLivingLab".

- Patrick Reignier is co-director of the "formation en apprentissage" of Ensimag (3 years program : 1 year for the Licence and 2 years for the Master)
- Patrick Reignier Supervises the industrial part of the "formation en apprentissage" of the Ensimag engineering school.
- Master: Patrick Reignier, Projet Genie Logiciel, 55h eqTD, M1, Ensimag/Grenoble INP, France.
- Master: Patrick Reignier, Développement d'applications communicantes, 18h eqTD, M2, Ensimag/Grenoble-INP, France
- Master: Patrick Reignier, Introduction aux applications reparties, 18h eqTD, M2, Ensimag/Grenoble-INP, France
- Master: Patrick Reignier, Applications Web et Mobiles , 27h eqTD, M1, Ensimag/Grenoble-INP, France
- Master: Patrick Reignier, Projet Systeme, 12h eq TD, M1, Ensimag/Grenoble-INP, France
- Licence: Patrick Reignier, Projet C, 20h eqTD, L3, Ensimag/Grenoble-INP, France.

10.2.1.3. Dominique Vaufreydaz

- Co-responsibility of the Graphic, Vision and Robotics track of the MOSIG Master program.
- In charge of the transversal numerical competence courses at the Grenoble Faculty of Economics (Grenoble and Valence campuses)
- Licence: Compétences Numériques, 126h eq TD,L1, Université Grenoble Alpes, France.
- Licence: Informatique appliquée à l'économie et à la gestion, 32 h eq TD, enseignement à distance, Licence, Université Grenoble Alpes, France.
- Licence: Pratique avancée du Tableur, 72 h eq TD, L3, Université Grenoble Alpes, France.
- Licence Professionnelle: Enquêtes et traitement d'enquêtes avec le logiciel Sphinx, 12h eq TD, Licence pro Métiers de l'Emploi et de la Formation, Université Grenoble Alpes, France.
- Licence Professionnelle: Administration en environnement hétérogène, 20h eq TD, Licence pro Administration et Sécurité des Systèmes et des Réseaux, Université Grenoble Alpes, France.
- IUT année spéciale: Programmation C++, 18h eq TD, Année Spéciale IUT Informatique, Université Grenoble Alpes, France.
- Master: Pratique avancée du Tableur, 24 h eq TD, M1 économie internationale et stratégies d'acteurs, Université Grenoble Alpes, France.
- Master: Développement Web Mobile, 24h eq TD, M2 Mathématiques et Informatique Appliquées aux Sciences Humaines et Sociales, Université Grenoble Alpes, France

10.2.1.4. Thierry Fraichard

- Master: Thierry Fraichard, Autonomous Robotics, 22.5h eqTD, M2 MOSIG, Univ. Grenoble Alpes.

10.2.2. Supervision - Doctoral theses completed in 2018

- Rémi Paulin, *Human-Robot Motion: an Attention-Based Approach*, 22 March 2018, Patrick Reignier and Thierry Fraichard.
- Nguyen Dinh Van, *Wireless Sensors Networks for Indoor Mapping and Accurate Localization for Low Speed Navigation in Smart Cities*, 5 December 2018, Fawzi Nashashibi and Eric Castelli

10.2.3. Supervision - Current Doctoral Students

- PhD in progress: Jose Grimaldo Da Silva Filho, "Human-Robot Motion, a Shared Effort Approach", Octobre 2015, Thierry Fraichard.
- PhD in progress: Matteo Ciocca, "Safe Robot Motion", Octobre 2016, Thierry Fraichard and Pierre-Brice Wieber.

- PhD in progress : Romain Bregier, Détection et estimation de pose d'instances d'objet rigide pour la manipulation robotisée, Octobre 2014, Frederic Devernay and James Crowley
- PhD in progress : Etienne Balit, expressive social robot design, Octobre 2014, Patrick Reignier and Dominique Vaufreydaz.
- PhD in progress : Interaction-Aware Tracking and Lane Change Detection in Highway Driving, David Sierra Gonzales, Octobre 2014, Dizan Vasquez and Emmanuel Mazer
- PhD in progress : Minh-khoa Nguyen, Robotics-inspired methods for modeling and simulation of large nanosystems, Octobre 2014, Leonaard Jaillet and Emmanuel Mazer
- PhD in progress : Amr Alyafi, explanatory observation of energy usage, Octobre 2015, Stephane Ploix and Patrick Reignier.
- PhD in progress : Amine Awada, activity recognition for smart energy management, Octobre 2015, Stephane Ploix and Patrick Reignier.
- PhD in progress : Liliya Tsetanova, Social Robotics, Octobre 2015, Veronique Aubergé and Patrick Reignier.
- PhD in progress : Thomas Guntz, Multimodal Observation of Subjects Engaged in Problem Solving, Octobre 2016, James Crowley and Dominique Vaufreydaz
- PhD in progress : Pavan Vashista, Situational Awareness of Autonomous Cars in Urban Areas, February 2016, Dominique Vaufreydaz and Anne Spalanzani (Inria Chroma).
- PhD in progress : Nashwa Abou Bakr, Observation of Kitchen Activities, Octobre 2016, James Crowley and Remi Ronfard
- PhD in progress : Raphael Frisch, conception de machine stochastique pour la localisation et la séparation de source sonor, Octobre 2016, Emmanuel Mazer

10.2.4. Juries

- Thierry Fraichard served as an expert evaluator in the PhD Jury of Florent Altché, Ecole Nat. Sup. des Mines de Paris, *Sep. 18*.
- Patrick Reignier served as a jury member of the Doctoral Jury of Hiary Landy Rajaonarivo (Lab-STICC, Brest)
- Patrick Reignier served as a president of the Doctoral Jury of Nathan Ramoly (Telecom Sud Paris)
- Patrick Reignier served as a president of the Doctoral Jury of Jérémy WAMBECKE (University Grenoble Alps)
- Patrick Reignier served as a president of the Doctoral Jury of Paola Gomez (University Grenoble Alps)
- Patrick Reignier served as a reporter of the Doctoral Jury of Mauricio Gomez Morales (Purdue University and Paris Est Créteil)
- Sabine Coquillart served as reporter for the doctoral jury of A. Costes at INSA Rennes
- Sabine Coquillart served as examiner for the doctoral jury of G. Cortes at Univ. Rennes 1.

RAINBOW Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- Marie Babel was the General Chair of the 2018 IROS Workshop on “Assistance and Service Robotics in a Human Environment”, Madrid, Spain, co-organized by Fabio Morbidi (MIS, Université Picardie Jules Verne), Francis Colas (Inria Nancy), David Daney (Inria Bordeaux) and Samer Mohammed (LISSI, Université of Paris-Est Creteil).
- Marie Babel was the Scientific Chair and the General co-Chair of the workshop “Robots d’assistance, handicap et vie quotidienne” organized in Inria Rennes on December 7th 2018.

10.1.1.2. Member of the Organizing Committees

- Paolo Robuffo Giordano co-organized with P. Salaris (Inria Sophia-Antipolis) and R. Spica (Stanford University) the workshop “The interplay between optimal estimation for improved action and optimal action for improved estimation” at the 2018 International Conference on Robotics and Automation, Brisbane, Australia
- Paolo Robuffo Giordano is Area Chair for RSS 2019 and Program Chair for MRS 2019
- Claudio Pacchierotti was the Publicity Chair of the Asiahaptics conference held in Songdo, Republic of Korea. He was also Award Co-Chair (Best Poster), and Session Co-Chair at Eurohaptics, Pisa, Italy. He also co-organized the Cross-Cutting Challenge “Expanding sensory interactions: the path to intelligent clothes and objects able to change the way we communicate with the world” at the IEEE Haptics Symposium, San Francisco, USA. Finally, he co-organized the workshop on ‘Haptic-enabled shared control of robotic systems: a compromise between teleoperation and autonomy’ at IROS in Madrid, Spain and the workshop on “Wearable and portable haptics for VR and AR” at IEEE VR in Reutlingen, Germany.
- François Chaumette organized the tutorial on Vision-based Robot Control at the 2018 International Conference on Robotics and Automation, Brisbane, Australia. (<https://team.inria.fr/rainbow/en/icra18-tutorial-vbrc>)

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

- Claudio Pacchierotti: Eurohaptics (Associate Editor)
- Paolo Robuffo Giordano: ICRA 2019 (Associate Editor)
- Eric Marchand: Orasis 2018
- François Chaumette: ICRA 2019 (Associate Editor)
- Alexandre Krupa: BioRob 2018 (Editor)
- Julien Pettré: IEEE VR 2019

10.1.2.2. Reviewer

- Claudio Pacchierotti: HAPTICS 2018, Eurohaptics 2018, ICRA 2018, IROS 2018, also Senior Reviewer for IEEE Robotics & Automation Society Young Reviewers Program (from 2016)
- Alexandre Krupa: IROS 2018 (1), ICRA 2019 (1)
- Paolo Robuffo Giordano: RSS 2018 (4), ICRA 2019 (2), ECC 2019 (1)

- Marie Babel: ICRA 2018 (1), SMC 2018 (2), IROS 2018 (2), ICRA 2019 (3)
- Vincent Drevelle: IROS 2018 (2), ICRA 2019 (1), AIM 2018 (1)
- Eric Marchand: IROS 2018 (1), ICRA 2018 (2), ICRA 2019 (2)
- François Chaumette: IROS 2018 (1), CDC 2018 (1)
- Julien Pettré: ACM SIGGRAPH 2018 (1), ACM SIGGRAPH Asia 2018 (1), Eurographics 2019 (1), IEEE VR 2019 (6)

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- Paolo Robuffo Giordano is Associate Editor for the IEEE Transactions on Robotics
- Paolo Robuffo Giordano is Guest Editor for the Special Issue on “Multi-Robot and Multi-Agent Systems” in Autonomous Robots, 2018
- Claudio Pacchierotti has been Guest Associate Editor of the IEEE Transactions on Haptics for the Special Issue on Wearable and Hand-held Haptics.
- Alexandre Krupa is Associate Editors of the IEEE Robotics and Automation Letters.
- Eric Marchand was an Associate Editor of IEEE Robotics and Automation Letters (RA-L) (till august 2018)
- Eric Marchand is a Senior Editor of IEEE Robotics and Automation Letters (RA-L) (from august 2018)
- Eric Marchand is an Editor for Interstices)i(
- François Chaumette: Senior Editor of the IEEE Trans. on Robotics, Editorial Board of the Int. Journal of Robotics Research, Founding Senior Editor of the IEEE Robotics and Automation Letters till June 2018, Editorial Board of the Springer Tracts in Advanced Robotics, and Board Member of the Springer Encyclopedia of Robotics.

10.1.3.2. Reviewer - Reviewing Activities

- Claudio Pacchierotti: JMRR (2), TOH (7), THMS (1), TIM (1), RAL (5), TBME (3), TMECH (1), IJMRCAS (1), IJCARS (1), Plos One (1), Journal of Engineering in Medicine (3), Wiley Interdisciplinary Reviews: Cognitive Science (2), Mechatronics (1), IJHCI (4), Advanced Robotics (1), International Journal of Advanced Robotic Systems (2), Endoscopy International Open (2), Frontiers in Robotics and AI (1)
- Paolo Robuffo Giordano: IEEE TRO (1), IEEE T-CYB (1), IEEE TCST (2), IEEE RAL (3), IJRR (1), IJC (1), AURO (1)
- Eric Marchand: CVIU (1)
- François Chaumette: IEEE TIE (4), IEEE RA-L (2)
- Julien Pettré: Graphical Models (1), Frontiers in Robotics and AI (1), IEEE TVCG (1)

10.1.4. Invited Talks

- Paolo Robuffo Giordano:
 - “Human-assisted robotics”. H. H. Bühlhoff’s Farewell Symposium - Flies, Men and Machines: A Scientific Adventure, Tübingen, Germany, August 2018
 - “Blending Human Assistance and Local Autonomy for Advanced Telemanipulation”. IROS 2018 Workshop on Haptic-enabled shared control of robotic systems: a compromise between teleoperation and autonomy, October 2018 [47]
 - “Formation Control and Localization with Onboard Sensing and Local Communication”. IROS 2018 Workshop on Multi-Robot Perception- Driven Control and Planning, October 2018 [48]

- “Physical Interpretation of Rigidity for Bearing Formations”, Second Workshop “Rigidity Theory for Multi-Agent Systems meets Parallel Robotics”, Nantes, France
- Claudio Pacchierotti:
 - “Our wearable haptics experience: story, insights, and open questions” Workshop “User-Centered Methods in Human-Robot Interaction” at IROS Conference, Madrid, Spain, 2018.
 - “Haptic feedback and robotic procedures” 10th Annual meeting on Robotic Gynaecological Surgery of the Society of European Robotic Gyneacological Surgery (SERGS), Milan, Italy, 2018.
 - “Cutaneous haptic feedback in robotic medical procedures.” Presentation to Titan Medical Inc., Strasbourg, France, 2018.
 - “Wearable haptics for virtual and augmented reality: applications in the entertainment and robotic fields” Robotics Research Jam Sessions at the University of Pisa, Pisa, Italy, 2018.
 - “Wearable fingertip haptics for mixed reality.” University of Aarhus, Herning, Denmark, 2018.
 - “Haptic feedback in robotic procedures: current work and perspectives.” Congress of the Society of Endometriosis and Uterine Disorders, Florence, Italy, 2018.
 - “The future of haptic feedback in robotic procedures.” Beyond Gynecologic Surgery conference, Clermont-Ferrant, France, 2018.
 - “Wearable fingertip haptics for Virtual Reality.” Workshop on “Wearable and portable haptics for VR and AR”, IEEE International Conference on Virtual Reality (VR), Reutlingen, Germany, 2018.
- François Chaumette:
 - “Visual servoing with and without image processing”, 1st Symposium on Intelligent Robots: Autonomy and Vision, Abu-Dhabi, March 2018 [46]
 - “Geometric and photometric vision-based robot control: modeling approach”, ICRA 2018 Tutorial on Vision-based Robot Control, Brisbane, May 2018 [45]
 - “Geometric and end-to-end visual servoing”, Plenary talk at IEEE Int. Conf. on CYBER Technology in Automation, Control, and Intelligent Systems, Tianjin, China, July 2018 [44]
- Fabien Spindler
 - “Vision-based robot control with ViSP”, ICRA 2018 Tutorial on Vision-based Robot Control, Brisbane, May 2018 [49]

10.1.5. Leadership within the Scientific Community

- Claudio Pacchierotti is the Chair of the IEEE Technical Committee on Haptics, and Secretary of the Eurohaptics Society.
- François Chaumette is a 2016-2018 elected member of the Administrative Committee of the IEEE Robotics and Automation Society. He is also a nominated member of the Scientific Council of the CNRS INS2I, a member of the Scientific Council of RTE Vedecom, and a founding member of the Scientific Council of the “GdR Robotique”.

10.1.6. Scientific Expertise

- Alexandre Krupa was reviewer of an ANR project (Generic project call 2018)
- Paolo Robuffo Giordano was reviewer for evaluating proposals of the ANR (French National Research Agency), NWO (Netherlands Organisation for Scientific Research), SNSF (Swiss National Science Foundation), MIUR (Italian National Research Agency)

- Marie Babel served as an expert for the International Mission of the French Research Ministry (MEIRIES) - Campus France
- Vincent Drevelle has been reviewer of an ANR ASTRID project
- François Chaumette served as member of IEEE RAS Pioneer Award Evaluation Panel and IEEE RAS Awards Evaluation Panel. He was a panel member of the 2018 ICREA Academia program (similar to IUF for Catalonia). He was also involved in the evaluation of a research proposal submitted to the Research Foundation of Flanders.

10.1.7. Research Administration

- Alexandre Krupa is a member of the CUMIR (“Commission des Utilisateurs des Moyens Informatiques pour la Recherche”) of Inria Rennes-Bretagne Atlantique. Alexandre Krupa also serves as Inria representative (correspondent) at the IRT Jules Verne.
- Eric Marchand served as secretary in the board of the “Association Française pour la Reconnaissance et l’interprétation des Formes” (AFRIF). He was also in charge of the Irisa Ph.D. students in the committee in charge of all the temporary recruitments (“Commission Personnel”) at Inria Rennes-Bretagne Atlantique and Irisa (till september 2018). He is in the board of the “Ecole doctorale Matisse”. He is the head of "Digital Signals and Images, Robotics" department at IRISA (from june 2018).
- François Chaumette serves as the president of the committee in charge of all the temporary recruitments (“Commission Personnel”) at Inria Rennes-Bretagne Atlantique and IRISA. He is also a member of the Head team of Inria Rennes-Bretagne Atlantique, and of the Scientific Steering Committee (COSS) of IRISA.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Marie Babel:

Master INSA2: “Robotics”, 26 hours, M1, INSA Rennes
 Master INSA1: “Architecture”, 30 hours, L3, INSA Rennes
 Master INSA2: “Computer science project”, 30 hours, M1, INSA Rennes
 Master INSA1: “Practical studies”, 16 hours, M1, INSA Rennes
 Master INSA2: “Image analysis”, 18 hours, M1, INSA Rennes
 Master INSA1: “Remedial math courses”, 50 hours, L3, INSA Rennes

François Chaumette:

Master SISEA: “”, 12 hours, M2, Université de Rennes 1
 Master ENS: “Visual servoing”, 6 hours, M1, Ecole Nationale Supérieure de Rennes
 Master ESIR3: “Visual servoing”, 8 hours, M2, Ecole supérieure d’ingénieurs de Rennes

Vincent Drevelle:

Master ESIR2: “Real-time systems and RTOS”, 24 hours, M1, Esir Rennes
 Master ILA: “Terrain information systems”, 30 hours, M2, Université de Rennes 1
 Master Info: “Artificial intelligence”, 20 hours, M1, Université de Rennes 1
 Licence Info: “Computer systems architecture”, 22 hours, L1, Université de Rennes 1
 Master Elec: “Electronics project”, 8 hours, M1, Université de Rennes 1
 Portail Info-Elec: “Discovering programming and electronics”, 14 hours, L1, Université de Rennes 1
 Licence Miage: “Computer programming”, 78 hours, L3, Université de Rennes 1
 Master Elec: “Instrumentation, localization, GPS”, 4 hours, M2, Université de Rennes 1
 Master Elec: “Multisensor data fusion”, 20 hours, M2, Université de Rennes 1
 Master IL: “Mobile robotics”, 32 hours, M2, Université de Rennes 1

Alexandre Krupa:

Master SIBM (Signals and Images in Biology and Medicine): “Medical robotics guided from images”, 4.5 hours, M2, Université de Rennes 1, Brest and Angers

Master FIP TIC-Santé: “Ultrasound visual servoing”, 6 hours, M2, Télécom Physique Strasbourg

Master INSA1: “Programmation Informatique”, 42 hours, INSA Rennes

Master ESIR3: “Ultrasound visual servoing”, 9 hours, M2, Esir Rennes

Eric Marchand:

Master Esir2: “Colorimetry”, 24 hours, M1, Esir Rennes

Master Esir2: “Computer vision: geometry”, 24 hours, M1, Esir Rennes

Master Esir3: “Special effects”, 24 hours, M2, Esir Rennes

Master Esir3: “Computer vision: tracking and recognition”, 24 hours, M2, Esir Rennes

Master MRI: “Computer vision”, 24 hours, M2, Université de Rennes 1

Master ENS: “Computer vision”, 16 hours, M2, ENS Rennes

Master MIA: “Augmented reality”, 4 hours, M2, Université de Rennes 1

Julien Pettré:

Master SIF: "Motion for Animation and Robotics", 6 hours, Université de Rennes 1

Master Artificial Intelligence and Advanced Visual Computing: "Advanced 3D graphics", 3 hours, Ecole Polytechnique

10.2.2. Supervision

- Ph.D. in progress: Quentin Delamare, “Algorithmes d’estimation et de commande pour des quadrirotors en interaction physique avec l’environnement”, started in September 2016, supervised by Paolo Robuffo Giordano and Antonio Franchi (LAAS)
- Ph.D. in progress: Rahaf Rahal, “Mixed tactile-force feedback for safe and intuitive robotic teleoperation”, started in October 2017, supervised by Paolo Robuffo Giordano and Claudio Pacchierotti
- Ph.D. in progress: Alexander Oliva, “Coupling Vision and Force for Robotic Manipulation”, started in October 2018, supervised by François Chaumette and Paolo Robuffo Giordano
- Ph.D. in progress: Axel Lopez Gandia, “Data assimilation for synthetic vision-based crowd simulation algorithms”, started in October 2016, supervised by Julien Pettré and François Chaumette
- Ph.D. in progress: Zane Zake (IRT Jules Verne), “Visual servoing for cable-driven parallel robots”, started in January 2018, supervised by Stéphane Caro (LS2N) and François Chaumette
- Ph.D. in progress: Xavier De Tinguy de la Giroulière, “Conception de techniques d’interaction multisensorielles pour la manipulation dextre d’objets en réalité virtuelle”, started in September 2017, supervised by Maud Marchal, Anatole Lécuyer (Hybrid group) and Claudio Pacchierotti
- Ph.D. in progress: Gerard Gallagher, “Haptic-enabled interaction techniques for Mixed Reality applications”, started in October 2018, supervised by Maud Marchal, Anatole Lécuyer (Hybrid group) and Claudio Pacchierotti
- Ph.D. in progress: Hadrien Gurnel “Haptic guidance of a biopsy needle”, started in October 2016, supervised by Alexandre Krupa, Maud Marchal (Hybrid team) and Laurent Launay (IRT b<>com)
- Ph.D. in progress: Agniva Sengupta, “Localization and characterization of objects with unknown shapes”, started in January 2017, supervised by Alexandre Krupa and Eric Marchand
- Ph.D. in progress: Romain Lagneau (Hybrid team), “Data-driven models for detexterous manipulation of robots”, started in October 2017, supervised by Alexandre Krupa and Maud Marchal (Hybrid team)

- Ph.D. in progress: Guillaume Vailland, “Outdoor wheelchair assisted navigation: reality versus virtuality”, started in November 2018, supervised by Marie Babel and Valérie Gouranton (Hybrid team)
- Ph.D. in progress: Salma Jiddi, “Photometric Registration of Indoor Real Scenes using an RGB-D Camera with Application to Mixed Reality”, to be defended in January 2019, supervised by Eric Marchand
- Ph.D. in progress: Ide-Flore Kenmogne “Localisation ensembliste de drones à l’aide de méthodes par intervalles”, to be defended in January 2019, supervised by Eric Marchand and Vincent Drevelle
- Ph.D. in progress: Xi Wang “Robustness of Visual SLAM techniques to light changing conditions”, started in September 2018, supervised by Eric Marchand and Marc Christie
- Ph.D. in progress: Agniva Sengupta “”, to be defended in January 2020, supervised by Eric Marchand and Alexandre Krupa
- Ph.D. in progress: Nicolas Le Borgne, “Contrôle partagé et navigation assistée d’un fauteuil roulant en extérieur”, started in October 2017, supervised by Marie Babel
- Ph.D. in progress: Aline Baudry, “Contribution à la modélisation des fauteuils roulants pour l’amélioration de leur navigation en mode semi-autonome”, started in October 2016, supervised by Marie Babel and Sylvain Guégan (Mechanical Engineering Dpt/LGCGM at Insa Rennes)
- Ph.D. in progress: Axel Lopez, “Character navigation based on optical flow”, started in October 2016, supervised by François Chaumette and Julien Pettré
- Ph.D. in progress: Javad Amirian, “Crowd motion prediction for robot navigation in dense crowds”, started in January 2018, supervised by Jean-Bernard Hayet and Julien Pettré
- Ph.D. in progress: Fabien Grzeskowiak, “Crowd simulation for testing robot navigation in dense crowds”, started in October 2018, supervised by Marie Babel and Julien Pettré
- Ph.D. in progress: Florian Berton, “Gaze analysis for crowd behaviours study”, started in October 2017, supervised by Anne-Hélène Olivier, Ludovic Hoyet and Julien Pettré
- Ph.D. defended: Pedro Patlan-Rosales, “A robotic control framework for quantitative ultrasound elastography”, defended in January 2018, supervised by Alexandre Krupa [5]
- Ph.D. defended: Lesley-Ann Dufflot, “Direct visual servoing using shearlet and wavelet transforms of the image”, defended in July 2018, supervised by Alexandre Krupa and Brahim Tamadazte (Minarob group at FEMTO-ST, Besançon) [4]
- Ph.D. defended: Fabrizio Schiano, “Bearing-based Localization and Control for Multiple Quadrotor UAVs”, defended in January 2018, supervised by P. Robuffo Giordano [7]
- Ph.D. defended: Louise Devigne, “Low-cost robotic solutions for safe assisted power wheelchair navigation: towards a contribution to neurological rehabilitation”, defended in December 2018, supervised by Marie Babel and Philippe Gallien (Pôle Saint Hélier)
- Ph.D. defended: Quentin Bateux, “Going further with direct visual servoing”, defended in January 2018, supervised by Eric Marchand [2]
- Ph.D. defended: Guillaume Cortes, “Contribution to the study of projection-based systems for industrial applications in mixed reality”, defended in October 2018, supervised by Eric Marchand and Anatole Lécuyer [Hybrid]
- Ph.D. defended: Firas Abi Farraj, “Contributions to Shared Control Architectures for Advanced Telemanipulation”, defended in December 2018, supervised by Paolo Robuffo Giordano [1]
- Ph.D. defended: Bryan Penin “Contributions to optimal and reactive vision-based trajectory generation for a quadrotor UAV”, defended in December 2018, supervised by Paolo Robuffo Giordano and François Chaumette [6]

10.2.3. Juries

- Claudio Pacchierotti: Lucia Schiatti (Ph.D., member, IIT, Genova, Italy), Matteo Rossi (Ph.D., member, Univ. Pisa, Pisa, Italy)
- Alexandre Krupa: Yinoussa Adagolodjo (Ph.D., reviewer, Univ. de Strasbourg, ICube)
- Paolo Robuffo Giordano: Nicolas Staub (Ph.D., member, LAAS-CNRS), Fabrizio Boriero (Ph.D., reviewer, Univ. Verona, Italy)
- Marie Babel: Francesco Barbosa Anda (Ph.D., member, LAAS, Toulouse), Dinh Nguyen Van (Ph.D., member, UPMC, Paris).
- Eric Marchand: Alexandre Morgand, (PhD, reviewer, univ. Clermont Auvergne) ; Sudhanya Chatterjee, (Ph.D. president, univ. de Rennes 1) ; Musaab Khalid, (Ph.D. president, Irstea Lyon) ; Romain Brégier, (Ph.D. president, INPG) ; Bogdan Khomutenko, (Ph.D. president, École centrale de Nantes) ; Lesley-Ann Duflot, (Ph.D. president, univ. de Rennes 1) ; Pedro Patlan-Rosales, (Ph.D. president, univ. de Rennes 1) ;
- François Chaumette: Davide Nicolis (Ph.D., Politecnico di Milano, reviewer), Marco Ferro (Ph.D., Univ La Sapienza, Roma, reviewer), Firas Abi-Farraj (Ph.D., president, Univ de Rennes 1)
- Julien Pettré: Pierre Fernbach (Ph.D. member, Univ. Toulouse Paul Sabatier, Laas)

10.3. Popularization

- Due to the visibility of our experimental platforms, the team is often requested to present its research activities to students, researchers or industry. Our panel of demonstrations allows us to highlight recent results concerning the positioning of an ultrasound probe by visual servoing, grasping and dual arm manipulation by Romeo, vision-based shared control using our haptic device for object manipulation, the control of a fleet of quadrotors, vision-based detection and tracking for space navigation in a rendezvous context, the semi-autonomous navigation of a wheelchair, and augmented reality applications. Some of these demonstrations are available as videos on VispTeam YouTube channel (<https://www.youtube.com/user/VispTeam/videos>).
- In October Firas Abi Farraj, Marco Aggravi, Claudio Pacchierotti and Fabien Spindler attended to the “Maker Fair” even in Rome (<https://2018.makerfairerome.eu/it/>) presenting various vision-based and shared control robotic demonstrations with Viper and Franka arms and haptic devices.
- Eric Marchand is an editor for Interstices)i(

10.3.1. Interventions

- Marie Babel participated to the Science Festival in October 2018 and animated an interactive animation session for general public organized in Acigné, France
- Solenne Fortun participated to the Tech’in Vitré forum with an interview in March 2018.
- Marie Babel animated an interactive session organized in INSA Rennes about "Women in Sciences" on December 19th, 2018 for female students.

RITS Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

Mohammad Abualhoul and Fawzi Nashashibi: chairs and co-organizers of the 1st CA2V workshop at the IEEE VTC'18 conference, Porto (Portugal), June 2018.

Fawzi Nashashibi and Mohammad Abualhoul: chairs and co-organizers of the CA2V workshop at the IEEE ICVES'18 conference, Madrid (Spain), September 2018.

Fawzi Nashashibi: chair of the AUTOCITS international workshop on connected and autonomous vehicles, December 13, Paris, France.

10.1.1.2. Member of the Organizing Committees

Fawzi Nashashibi was member of the organizing committee of the IEEE/RSJ IROS 2018 Autonomous Driving Events including: PPNIV Workshop, Round table and Autonomous vehicle on-site demonstrations.

Fawzi Nashashibi was member of the Steering Committee of the IEEE Global Communications Conference, 9-13 December 2018, Abu Dhabi, UAE.

10.1.2. Scientific Events Selection

Jean-Marc Lasgouttes: co-organizer of the Symposium "Large Random Networks and Constrained Random Walks" in honor of the 75th birthday of Guy Fayolle, Dijon (France), August 27–28.

10.1.2.1. Chair of Conference Program Committees

Raoul de Charette: program chair of Workshop 'Real-World Challenges for Robotic Vision' CVPR 2018 (CVPRW).

10.1.2.2. Member of the Conference Program Committees

Raoul de Charette: program committee member of 'Conférence Française de Photogrammétrie et de Télédétection' (CFPT).

Fawzi Nashashibi : co-organizer of the breakout session *Artificial Intelligence and Deep Machine Learning Tools and Algorithms for Automated Vehicles: The State of the Art and Practice* at the Automated Vehicles Symposium, San Francisco (USA), 9-12 July, 2018.

10.1.2.3. Reviewer

Mohammad Abualhoul: *IEEE ITS 2018, IEEE IV 2018, IEEE ICVES 2018, TRA 2018.*

Raoul de Charette: *CVPR 2018, ACCV 2018, IEEE ICRA 2018, CVPR Workshop 2018, IEEE IV 2018.*

Jean-Marc Lasgouttes: *IEEE ITSC 2018.*

Fawzi Nashashibi : *IEEE ICRA 2018, IEEE IROS 2018, IEEE IV 2018, IEEE ITSC 2018, IEEE ICARCV 2018, IEEE VTC 2018, IEEE ICVES 2018*

Anne Verroust-Blondet: *IEEE IV 2018, IEEE ITSC 2018, IEEE ICARCV 2018.*

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

Guy Fayolle: associate editor of the journal *Markov Processes and Related Fields*.

Fawzi Nashashibi: associate editor of the journal *IEEE Transactions on Intelligent Vehicles*, associate editor of the journal *IEEE Transactions on Intelligent Transportation Systems*.

Anne Verroust-Blondet: associate editor of the journal *The Visual Computer*.

10.1.3.2. Reviewer - Reviewing Activities

Raoul de Charette: *IEEE Transactions on Intelligent Transportation Systems*

Guy Fayolle: *AAP, MPRF, PTRF, QUESTA, European Journal of Combinatorics, JSP, Physica A, Springer Science*.

Jean-Marc Lasgouttes: *IEEE Transactions on Intelligent Transportation Systems*

Fawzi Nashashibi: *IEEE Transactions on Intelligent Transportation Systems, IEEE Transactions on Intelligent Vehicles, Transportation Research Part C*.

Anne Verroust-Blondet: *IEEE Transactions on Intelligent Vehicles*

10.1.4. Invited Talks

Mohammad Abualhoul: keynote speaker in ICVES-CA2V-2018 Workshop in Madrid, June 2018.

Raoul de Charette: public presentation at BNF Paris on Artificial Intelligence (2018-10-08).

Guy Fayolle: guest speaker at the conference *Grands réseaux aléatoires et marches contraintes*, held at the University of Bourgogne, Dijon, 27-28th August 2018, <http://www.lmpt.univ-tours.fr/ConferenceGuyFayolle75/>.

Guy Fayolle: four long talks on topics related to the book [2] at the working group GTMA (<http://divizio.joomla.com/seminaires-et-gdt/11-groupe-de-travail-autour-des-marches-dans-le-quart-de-plan>).

G rard Le Lann: "Conduite automatis e, cyber-s curit  et enjeux de soci t ", Espace des Sciences, Rennes, April 2018.

G rard Le Lann: "Future Directions in Autonomic Vehicular Networks", IEEE & IFIP Med-Hoc-Net Workshop, Capri, Italy, June 2018.

G rard Le Lann: "Future Directions in Connected Autonomous Vehicles and Autonomic Vehicular Networks", ATOS Worldwide Annual TechForum, Seclin, July 2018.

G rard Le Lann: "Future Directions in Connected Autonomous Vehicles and Autonomic Vehicular Networks", CNIL, Paris, September 2018.

G rard Le Lann: "Safety, Privacy and Cybersecurity in Future Vehicular Networks", AutoCITS Workshop, Inria Paris, December 2018.

Fawzi Nashashibi: keynote speaker on *Scientific and technical challenges of autonomous navigation for connected autonomous vehicles* in ICVES-CA2V-2018 Workshop in Madrid, June 2018.

Fawzi Nashashibi: keynote speaker on *Autonomous vehicles in smart cities: the next challenges* in PAMS international conference, Pangyo (S. Korea), 15-16 November 2018.

Fawzi Nashashibi: keynote and Round table speaker on *Scientific and technical challenges of autonomous navigation for connected autonomous vehicles* at the International Conference on Mobility Challenges, Gif-sur-Yvette (France), 6-7 December 2018.

Fawzi Nashashibi: keynote on *Evolution and challenges of mobility with the increased introduction of artificial intelligence*, at the TOTAL AI FOR LEADERS PROGRAM, Paris (France), March 19, 2018.

Fawzi Nashashibi: keynote on the *Challenges et opportunities of autonomous mobility in smart cities*, in the working day on Intelligent Mobility, organized by TECNALIA, Madrid (Spain), February 2018.

10.1.5. Scientific Expertise

Guy Fayolle is scientific advisor and associate researcher at the *Robotics Laboratory of Mines ParisTech*. He is also collaborating member of the research-team SPECFUN at Inria-Saclay.

Jean-Marc Lasgouttes is member of the *Conseil Académique* of Université Paris-Saclay.

G rard Le Lann: contributions to *Report on Safer Roads with Automated Vehicles ?*, International Transportation Forum, OECD, April 2018, 45 p. ⁰

Fawzi Nashashibi is an associate researcher at the *Robotics Laboratory, Mines ParisTech*. He is an evaluator/reviewer of European H2020 projects.

10.1.6. Research Administration

Jean-Marc Lasgouttes is a member of the *Comit  Technique Inria*.

Guy Fayolle is a member of the working group IFIP WG 7.3.

Fawzi Nashashibi is a member of the international Automated Highway Board Committee of the TRB (AHB30). He is a member of the Board of Governors of the VEDECOM Institute representing Inria and of the Board of Governors of MOV'EO Competitiveness cluster representing Inria.

Anne Verroust-Blondet is the scientific correspondent of the European affairs and of the International Partnerships for Inria Paris, member of the COST-GTRI committee at Inria (Committee in charge of the evaluation of international projects) and member of the "emplois scientifiques" committee of Inria Paris.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Licence: Fawzi Nashashibi, "Programmation avanc e", 84h, L1, Universit  Paris-8 Saint-Denis, France.

Master: Carlos Flores and Anne Verroust-Blondet, "Le v hicule autonome. Pr sentation des recherches de l' quipe-projet RITS", 1.5 h, 2nd year, Ecole des Ponts ParisTech, France, September 2018.

Master: Jean-Marc Lasgouttes, "Analyse de donn es", 54h, second year of Magist re de Finance (M1), University Paris 1 Panth on Sorbonne, France.

Master: Jean-Marc Lasgouttes, "Analyse de donn es", 52.5h, Master 1 SIC APP, University Paris 1 Panth on Sorbonne, France.

Master: Fawzi Nashashibi, "Image synthesis and 3D Infographics", 12h, M2, INT T l com Sud-Paris.

Master: Fawzi Nashashibi, "Obstacle detection and Multisensor Fusion", 4h, M2, INSA de Rouen.

Master: Fawzi Nashashibi, "Perception and Image processing for Mobile Autonomous Systems", 12h, M2, University of Evry.

Master: Renaud Poncelet, "M catronique fondamentale", 64h, 4rd year, P le Universitaire L onard de Vinci, Paris La D fense, France.

Doctorat: Jean-Marc Lasgouttes, "Analyse de donn es fonctionnelles", 31.5h, Mast re Sp cialis  "Expert en sciences des donn es", INSA-Rouen, France

10.2.2. Supervision

PhD: Zayed Alsayed, "Characterizing the Robustness and Enhancing the Accuracy of SLAM-based Localization Systems for Autonomous Driving", T l com ParisTech, June 2018, supervisor: Anne Verroust-Blondet, co-supervisors: Fawzi Nashashibi, Guillaume Bresson.

⁰<https://www.itf-oecd.org/sites/default/files/docs/safer-roads-automated-vehicles.pdf>

PhD: Carlos Flores, “Control Architecture for Adaptive and Cooperative Car-Following”, Mines ParisTech, PSL Research University, December 2018, supervisor: Fawzi Nashashibi, co-supervisor: Vicente Milanés.

PhD: Fernando Garrido, “Two-staged local trajectory planning based on optimal pre-planned curves interpolation for human-like driving in urban areas”, Mines ParisTech, PSL Research University, December 2018, supervisor: Fawzi Nashashibi, co-supervisors: Vicente Milanés, Joshué Pérez.

PhD: Francisco Navas, “Stability analysis for controller switching in autonomous vehicles”, Mines ParisTech, PSL Research University, November 2018, supervisor: Fawzi Nashashibi, co-supervisor: Vicente Milanés.

PhD: Dinh-Van Nguyen, “Wireless Sensors Networks for Indoor Mapping and Accurate Localization for Low Speed Navigation in Smart Cities”, Mines ParisTech, PSL Research University, December 2018, supervisor: Fawzi Nashashibi, co-supervisor: Eric Castelli.

PhD in progress: Pierre de Beaucorps, “Autonomous vehicle: behavior prediction and Interaction with road users”, UPMC Sorbonne University, January 2016, supervisor: Anne Verroust-Blondet, co-supervisor: Fawzi Nashashibi.

PhD in progress: Farouk Ghallabi, “Environment modeling and simultaneous localization of a mobile vehicle on motorways: a multi-sensor approach”, Mines ParisTech, PSL Research University, October 2016, supervisor: Fawzi Nashashibi.

PhD in progress: Maximilian Jaritz, “Perception multi-capteur pour la conduite autonome grâce à l’apprentissage profond”, Mines ParisTech, PSL Research University, January 2017, supervisor: Fawzi Nashashibi, co-supervisor: Raoul de Charette.

PhD in progress: Danut-Ovidiu Pop, “Deep learning techniques for intelligent vehicles”, INSA Rouen, May 2016, supervisor: Abdelaziz Bensrhair, co-supervisor: Fawzi Nashashibi.

PhD in progress: Imane Matout, “Estimation de l’intention des véhicules pour la prise de décision et le contrôle sans faille en navigation autonome”, Mines ParisTech, PSL Research University, December 2017, supervisor: Fawzi Nashashibi, co-supervisor: Vicente Milanés.

PhD in progress: Kaouther Messaoud, “Détermination des manoeuvres et des intentions des véhicules avoisinant un véhicule autonome”, UPMC Sorbonne University, October 2017, supervisor: Anne Verroust-Blondet, co-supervisors: Fawzi Nashashibi, Itheri Yahiaoui.

PhD in progress: Luis Roldao, “Modélisation 3D de l’environnement et de la manoeuvrabilité d’un véhicule”, UPMC Sorbonne University, October 2017, supervisor: Anne Verroust-Blondet, co-supervisor: Raoul de Charette.

Starting PhD: Renaud Poncelet, “Navigation autonome en présence d’obstacles fortement dynamiques au mouvement incertain”, UPMC Sorbonne University, September 2018, supervisor: Anne Verroust-Blondet, co-supervisor: Fawzi Nashashibi.

10.2.3. Juries

Fawzi Nashashibi was a jury member of the PhD thesis of Mr. Laurent Delobel - *Agrégation d’Information Pour la Localisation d’un Robot Mobile sur une Carte Imparfaite* -, Université Clermont-Auvergne, Clermont-Ferrand, 16 February 2018.

Fawzi Nashashibi was a reviewer of the PhD thesis of Mr. Yrvann Emzivat *Safety System Architecture for the Design of Dependable and Adaptable Autonomous Vehicles* -, Université Bretagne Loire, Nantes (France), 30 May 2018.

Fawzi Nashashibi was a jury member of the PhD thesis of Mr. Aymeric Dujardin - *Détection d’obstacles par stéréovision en environnement non structuré* -, Normandie Université, Saint-Etienne-du-Rouvray (France), 03 July 2018.

Fawzi Nashashibi participated, as examiner and president, to the HdR committee of Oyunchimeg Shagdar *Optimizing Wireless Communications in Dense Mobile Environments*, Université de Versailles Saint-Quentin-en-Yvelines, 6 September 2018.

Anne Verroust-Blondet was a reviewer of the PhD thesis of Sarah Bertrand - *Analyse d'images pour l'identification multi-organes d'espèces végétales*, Université Lyon 2, 10 December 2018.

Anne Verroust-Blondet was a jury member of the PhD thesis of Dai-Duong Nguyen - *A vision system based real-time SLAM application*, Université Paris-Saclay, 7 December 2018.

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

Fawzi Nashashibi was the coordinator of the Inria Livre Blanc "Véhicules autonomes et connectés, les défis actuels et les voies de recherche" ⁰.

10.3.2. Articles and contents

A few press interviews and popular science was done in 2018.

- In books/journals/radios for the general public:

Raoul de Charette was interviewed by A. Devillard for:

- *Pour la voiture autonome, l'algorithme d'apprentissage qui ne s'entraîne pas*⁰, Science et Avenir, 2018-03-18;

- *Les failles de la voiture autonome*⁰, Sciences et Avenir, 2018-04-26;

Raoul de Charette and Fawzi Nashashibi were interviewed by M. Moragues for *[Infographie] L'intelligence artificielle n'est pas un as du volant*⁰, L'Usine Nouvelle, 2018-09-23;

Raoul de Charette was interviewed for Sciences et Avenir, *La voiture autonome en quête de la "vision" parfaite*, 2018-09-27;

Raoul de Charette and Fawzi Nashashibi were interviewed for Challenges, *L'intelligence artificielle bute sur la sécurité routière*, 2018-10-04;

Raoul de Charette was interviewed for Radio France Internationale, 2018-03-30;

Fawzi Nashashibi was interviewed for La Tribune, *Ce que l'IA change dans l'auto : l'ère de la voiture autonome*⁰, 2018-05-02;

Fawzi Nashashibi was interviewed by Dominique Filippone for *Voitures autonomes : Pas avant 2040 en France selon l'Inria*⁰, Le Monde Informatique, 2018-05-15;

Fawzi Nashashibi was interviewed by Loup Besmond de Senneville for *Les recommandations des chercheurs pour l'éthique des voitures autonomes*⁰, La Croix, 2018-05-18;

Fawzi Nashashibi was interviewed by Frank Niedercorn for *Fawzi Nashashibi : "Il y a encore bien des obstacles pour le véhicule autonome"*⁰, Les Echos, 2018-06-29;

Fawzi Nashashibi was interviewed for L'Usine Nouvelle, no 3577, *Automobile le graal de l'autonomie*, 2018-09-20;

Fawzi Nashashibi was interviewed by Laurène Le Fournier for Radio Village Innovation, July 2018.

⁰<https://www.inria.fr/institut/strategie/vehicules-autonomes-et-connectes>

⁰https://www.sciencesetavenir.fr/high-tech/pour-la-voiture-autonome-un-algorithme-d-apprentissage-qui-ne-s-entraîne-pas_122033

⁰https://www.sciencesetavenir.fr/high-tech/transports/les-failles-de-la-voiture-autonome_123502

⁰<https://www.usinenouvelle.com/editorial/infographie-l-intelligence-artificielle-n-est-pas-un-as-du-volant.N742309>

⁰[https://www.latribune.fr/entreprises-finance/industrie/automobile/ce-que-l-ia-change-dans-l-auto-l-ere-de-la-voiture-autonome-](https://www.latribune.fr/entreprises-finance/industrie/automobile/ce-que-l-ia-change-dans-l-auto-l-ere-de-la-voiture-autonome-776767.html)

776767.html

⁰<https://www.lemondeinformatique.fr/actualites/lire-voitures-autonomes-pas-avant-2040-en-france-selon-l-inria-71733.html>

⁰[https://www.la-croix.com/Sciences-et-ethique/Ethique/recommandations-chercheurs-lethique-voitures-autonomes-2018-05-18-](https://www.la-croix.com/Sciences-et-ethique/Ethique/recommandations-chercheurs-lethique-voitures-autonomes-2018-05-18-1200940092)

1200940092

⁰https://www.lesechos.fr/29/06/2018/LesEchos/22727-506-ECH_fawzi-nashashibi—il-y-a-encore-bien-des-obstacles-pour-le-vehicule-autonome-.htm

Fawzi Nashashibi was interviewed for France Info, 2018-09-07.

- For online publications: (Interstices, Images des Maths, Binaire, Wikipedia), and more widely blog articles:

Raoul de Charette was interviewed by K. Haske for MyScienceWork *Where are they now ? Raoul de Charette*⁰, 2018-09-04, and by J. Jongwane for Interstices *Les algorithmes de vision pour les véhicules autonomes*⁰ [36];

Fawzi Nashashibi was interviewed by Mrs. Barbara Vignaux to prepare an exhibition on the autonomous car for the *Science Actualités* area of the City of Science and Industry (*Cité des Sciences et des Industries*), Paris. It was followed by the development of an article entitled "*Voiture autonome: révolution en route ?*" (Autonomous Car: revolution on the way?);

In January 2018, Gérard Le Lann has been invited to contribute to Blog Binaire Le Monde on: *Sécurité routière et cybersécurité*⁰;

In May 18th, an on-line article titled *Inria dévoile son Livre blanc sur les Véhicules Autonomes et Connectés* and relaying the contents of Inria white paper on connected autonomous vehicles was published at <http://www.auto-innovations.com/communiquel1374.html>.

10.3.3. Interventions

- Raoul de Charette and Renaud Poncelet made a demonstration at Inria RII meeting ("Mobilité & environnements", 2018-11-20, Station F, Paris);
- RITS was involved in welcoming schoolchildren in Paris center on December 21st.

⁰<https://www.mysciencework.com/omniscience/now-raoul-charette>

⁰<https://interstices.info/les-algorithmes-de-vision-pour-les-vehicules-autonomes/>

⁰<http://binaire.blog.lemonde.fr/2018/01/19/securite-routiere-et-cybersecurite/>

LINKMEDIA Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

- LinkMedia organized the joint conferences CORIA - TALN in Rennes, May 2018, including several workshops and a hackathon on Fake News detection. Full program: <https://project.inria.fr/coriataIn2018/fr/>.
- Guillaume Gravier and Vincent Claveau organized a special conference about "IA and media" in the framework of the European Cyber Week in Nov 2018, Rennes. Full program: <https://www.european-cyber-week.eu/medias-ia-et-cyber.html>

9.1.1.1. General Chair, Scientific Chair

- Laurent Amsaleg is general co-chair of ACM Intl. Conf. on Multimedia 2019.
- Guillaume Gravier is technical program co-chair for ACM Intl. Conf. on Multimedia 2019.
- Vincent Claveau was general chair of CORIA-TALN 2018.

9.1.1.2. Member of the Organizing Committees

- Guillaume Gravier was special session co-chair for IEEE Intl. Conf. on Content-Based Multimedia Indexing 2018
- Simon Malinowski was member of the Organizing Committee of the AALTD 18 Workshop (co-located with ECML-PKDD 18)
- Ewa Kijak was publication chair for IEEE Intl. Conf. on Content-Based Multimedia Indexing 2018

9.1.2. Scientific Events Selection

9.1.2.1. Chair of Conference Program Committees

- Vincent Claveau and Pascale Sébillot were program chairs of TALN 2018.
- Anne-Lyse Minard was demo chair of CORIA-TALN 2018.

9.1.2.2. Member of the Conference Program Committees

- Laurent Amsaleg was a PC member of: Extraction et Gestion de Connaissances, European Signal Processing Conference, ACM International Conference on Multimedia Retrieval, Multimedia Modeling, Content-Based Multimedia Indexing, IEEE International Conference on Multimedia & Expo, International Conference on Similarity Search and Applications, Multimedia Information Retrieval and Applications.
- Guillaume Gravier was a PC member of: ACM International Conference on Multimedia, ACM International Conference on Multimedia Retrieval, IEEE International Conference on Multimedia & Expo, European Conference on Information Retrieval, International Symposium on Multimedia, International Conference on Multimedia Modeling
- Simon Malinowski was a PC member of: Advanced analytics and Learning on Temporal Data 2018
- Vincent Claveau was a PC member of: European Conference on Information Retrieval (ECIR), Computational Linguistics (CoLing), International Conference in Artificial Intelligence (IJCAI), International Conference on MultiMedia Modeling (MMM), EMNLP (demo), ACL (demo), HumaNum workshop with EGC, TexMine workshop with EGC, DeFT workshop with TALN.
- Miaojing Shi was a PC member of: International Conference on Computer Vision and Pattern Recognition (CVPR), International Conference on Image Processing, Applications and Systems (IPAS), Asian Conference on Computer Vision (ACCV).

- Ewa Kijak was a PC member of: ACM International Conference on Multimedia, IEEE Intl. Conf. on Content-Based Multimedia Indexing
- Yannis Avrithis was a PC member of: IEEE Intl. Conf. on Computer Vision and Pattern Recognition (CVPR), European Conference on Computer Vision (ECCV).
- Teddy Furon was a PC member of: IEEE Workshop on Information Forensics and Security, IEEE International Conference on Image Processing, International Conference on Similarity Search and Applications.
- Pascale Sébillot was a PC member of: AAAI Conf. on Artificial Intelligence, European Conference on Information Retrieval (ECIR), International Joint Conference on Artificial Intelligence and European Conference on Artificial Intelligence (IJCAI-ECAI), Language Resources and Evaluation Conference (LREC), Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL HLT).

9.1.3. Journal

9.1.3.1. Member of the Editorial Boards

- Laurent Amsaleg was guest editor for the special issue of the Information Systems Journal, best papers from the SISAP 2016 conference.
- Laurent Amsaleg was guest editor for the special issue of the Information Systems Journal, best papers from the SISAP 2017 conference.
- Guillaume Gravier is associate editor of IEEE Trans. on Multimedia
- Vincent Claveau is Chief Editor of the ISTE journal RIDoWS
- Vincent Claveau is member of the editorial board of the journal Traitement Automatique des Langues (TAL)
- Christian Raymond is member of the Editorial board of the journal Discours
- Pascale Sébillot is editor of the Journal Traitement Automatique des Langues.
- Pascale Sébillot is member of the editorial board of the Journal Traitement Automatique des Langues.

9.1.3.2. Reviewer - Reviewing Activities

- Laurent Amsaleg was a reviewer for: IEEE Transactions on Information Forensics and Security, ACM Transactions on Information Systems.
- Christian Raymond was a reviewer for: Multimedia Tools and Applications
- Vincent Claveau was a reviewer for: Multimedia Tools and Applications, Technique et Sciences Informatiques, Traitement Automatique des Langues
- Miaojing Shi was a reviewer for: IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Transactions on Image Processing, IEEE Transactions on Circuits and Systems for Video Technology, IEEE Transactions on Multimedia
- Yannis Avrithis was a reviewer for: IEEE Transactions on Pattern Analysis and Machine Intelligence
- Teddy Furon was a reviewer for: IEEE Transactions on Information Forensics and Security, IEEE Transactions on Signal Processing, IEEE Signal Processing Letters, MDPI Entropy Journal.
- Pascale Sébillot reviewed for Traitement Automatique des Langues.

9.1.4. Invited Talks

- Miaojing Shi gave an invited talk at Shanghai Jiaotong University, Shanghai.
- Miaojing Shi gave an invited talk at Tongji University, Shanghai.
- Miaojing Shi gave an invited keynote at FranceIsAI 2018, Oct 17-19, Paris.

9.1.5. Leadership within the Scientific Community

- Laurent Amsaleg is a member of the Steering Committee of SISAP for the 2016-2020 term
- Guillaume Gravier is member of the Community Council of the Mediaeval Multimedia Evaluation series
- Guillaume Gravier coordinated the answer to the call "Institut inter disciplinaire de l'IA" for Rennes.
- Guillaume Gravier was president of the Scientific Evaluation Committee of the National Research Agency for the theme 'Knowledge, data, content, big data - AI'
- Guillaume Gravier is a member of the scientific committee of the preGDR Traitement Automatique des Langues
- Vincent Claveau is a deputy head of the GdR CNRS MaDICS <http://www.madics.fr>
- Vincent Claveau is the finance head of ARIA <http://www.asso-aria.org>
- Pascale Sébillot is a member of the permanent steering committee of Conf. Francophone en Traitement Automatique des Langues Naturelles.
- Pascale Sébillot is a member of the committee of leaders of the preGDR Traitement Automatique des Langues reflection axes (in charge of the Intermodality and Multimodality axis (with B. Favre, LIS Marseille)).

9.1.6. Scientific Expertise

- Miaojing Shi was expert evaluator for the French National Research Agency (ANR).

9.1.7. Research Administration

- Guillaume Gravier is deputy director of Institut de Recherche en Informatique et Systèmes Aléatoires (IRISA, UMR 6074)
- Guillaume Gravier is a member of the Board of the technology cluster Images & Réseaux.
- Guillaume Gravier is a member of the Board of the Comité des Projets of Inria - Rennes Bretagne Atlantique.
- Pascale Sébillot is a member of the Conseil National des Universités 27th section (computer science).
- Pascale Sébillot is the director of the Computer Science Laboratory, INSA Rennes.
- Pascale Sébillot is the deputy director of the Scientific Advisory Committee of IRISA UMR 6074.
- Pascale Sébillot is a member of the theses advisory committee of the MathSTIC doctoral school.
- Pascale Sébillot is a member of the board of the MathSTIC doctoral school.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence: Laurent Amsaleg & Teddy Furon, Indexation multimédia, 10h, L3-cours invité, ENS Rennes, France

Licence: Laurent Amsaleg, Bases de données avancées, 2h, L3-option génie mathématique, INSA Rennes, France

Licence: Guillaume Gravier, Probability and statistics, 16h, L3, INSA Rennes, France

Licence: Guillaume Gravier, Natural Language Processing, 12h, L3 & M1, INSA Rennes, France

Engineering school: Vincent Claveau, Machine Learning, 16h, 3rd year, INSA Rennes, France

Engineering school: Vincent Claveau, Information Retrieval, 10h, 3rd year, ENSSAT Lannion, France

Master: Vincent Claveau, Information Retrieval, 10h, M2 MIAGE, Univ. Rennes, France
 Master: Laurent Amsaleg, Bases de données avancées, 25h, M2, INSA Rennes, France
 Master: Guillaume Gravier, Data analysis and probabilistic modeling, 30h, M2, University Rennes 1, France
 Master: Simon Malinowski, Méthodes de prédiction, 32h, M2 Miage, Univ. Rennes
 Master: Simon Malinowski, Apprentissage automatique, 24h, M2 Miage, Univ. Rennes
 Master: Simon Malinowski, Fouille de données symboliques, 12h, M2 Miage, Univ. Rennes
 Master: Christian Raymond, Dialogue, 4H, M2 SIF, Univ. Rennes
 Master: Ewa Kijak, Image processing, 67h, M1, ESIR, France
 Master: Ewa Kijak, Supervised machine learning, 15h, M2R, University Rennes 1, France
 Master: Ewa Kijak, Supervised machine learning, 15h, M2, University Rennes 1, France
 Master: Ewa Kijak, Image classification, 45h, M1, ESIR, France
 Master: Ewa Kijak, Image indexing, 17h, M2, University Rennes 1, France
 Master: Ewa Kijak, Indexing and multimedia databases, 15h, M2, ENSSAT, France
 Master: Ewa Kijak, Computer vision, 22h, M2, ESIR, France
 Master: Yannis Avrithis, Deep learning for vision, 20h, M2 SIF, France
 Master: Teddy Furon, Rare event simulations, 20h, M2 option génie mathématique, INSA, France
 Master: Pascale Sébillot, Natural Language Programming, 6h, M1, INSA Rennes, France

9.2.2. Supervision

PhD in progress: Hanwei Zhang, Deep Learning in Adversarial Contexts, October 2017, Laurent Amsaleg, Yannis Avrithis, Teddy Furon & Ewa Kijak
 PhD in progress: Marzieh Gheisari-Khorasgani, Secure identification in the Internet of Things, January 2018, Laurent Amsaleg & Teddy Furon
 PhD in progress: Cédric Maigrot, Détection de fausses informations dans les réseaux sociaux, October 2015, Laurent Amsaleg, Vincent Claveau & Ewa Kijak
 PhD in progress: Ricardo Carlini-Sperandio, Unsupervised motif mining in multimedia time series, August 2015, Laurent Amsaleg & Guillaume Gravier
 PhD in progress: Antoine Perquin, Universal speech synthesis through embeddings of massive heterogeneous data, October 2017, Laurent Amsaleg, Gwénolé Lecorvé & Damien Lolive (with Expression, IRISA team)
 PhD in progress: Tong Xue, Visualization and collaborative analysis of document collections and extracted knowledge for data journalism, October 2018, Laurent Amsaleg & Anastasia Bezerianos
 PhD in progress: Mathieu Laroze, Active learning on adaptive representations for object detection in high-resolution imaging, started June 2016, Romain Dambreville, Chloe Friguet, Ewa Kijak and Sebastien Lefevre (with OBELIX, IRISA team)
 PhD in progress: Mikail Demirdelen, User-adapted multi-document multimedia synthesis, started Oct. 2016, Guillaume Gravier & Pascale Sébillot
 PhD in progress: Cheikh Brahim El Vaigh, Incremental content to data linking leveraging ontological knowledge in data journalism, started Oct. 2017, Guillaume Gravier, Pascale Sébillot and François Goasdoué (with CEDAR, Inria team)
 PhD in progress: Cyrielle Mallart, Incremental dynamic construction of knowledge bases from text mining, started Dec. 2018, Guillaume Gravier & Pascale Sébillot (with Ouest-France)
 PhD in progress: Oriane Siméoni, Invariance and supervision in visual learning, started Oct. 2016, Yannis Avrithis & Guillaume Gravier

PhD in progress: Zhaohui Yang, learning visual models with minimal human supervision, Jan. 2018, Miaojing Shi & Yannis Avrithis & Chao Xu (Peking University, Beijing)

PhD in progress: Feng Xiong, Perception and self-learning of service robot in dynamic scenarios. Nov. 2019, Miaojing Shi & Qijun Chen (Tongji University, Shanghai)

PhD in progress: Yann Lifchitz, Few shot learning for object recognition in aerial images. Started Mar. 2018, Yannis Avrithis, Sylvaine Picard (Safran) and Andrei Bursuc (Valeo).

9.2.3. Juries

Laurent Amsaleg

- PhD, reviewer, André Belchior Mourão, *Towards an Architecture for Efficient Distributed Search of Multimodal Information*, Universidade Nova de Lisboa, April 2018.

Ewa Kijak

- PhD, member, Himalaya Jain, *Learning compact representations for large scale image search*, University Rennes 1, June 2018.

Guillaume Gravier

- HDR, reviewer, Anthony Larcher, Le Mans Université, Déc. 2018.
- PhD, reviewer, Sébastien Delecraz, Aix-Marseille Université, Dec. 2018.

Teddy Furon

- PhD, member, Dimche Kostadinov, *Nonlinear Transform Learning: Model, Applications, and Algorithms*

Pascale Sébillot

- PhD, member, Alexandre Bérard, Université Grenoble Alpes, June 2018.
- PhD, president, Caroline Langlet, Télécom ParisTech, Sept. 2018.

Vincent Claveau was reviewer for the mid-term PhD auditions of Anna Koroleva, LIMSI, Christopher Norman, LIMSI, Zheng Zhang, LIMSI.

9.3. Popularization

9.3.1. Articles and contents

- Interviews in order to popularize: Guillaume Gravier was interviewed on AI technology for Sciences Ouest
- Vincent Claveau gave interviews about Fake News detection in the following journals: *Stratégies* 06/06/2018 and 12/10/2018, *LCI.fr* 8/06/2018, *Le Monde.fr* 24/05/2018, *Sciences Ouest* n363, *Sciences et Avenir* 30/05/2018 and xx/12/2018, *01net* n894
- Ewa Kijak was interviewed by *LeTemps.ch*

9.3.2. Interventions

- Public exhibitions: Vincent Claveau and Guillaume Gravier presented at *Futur.e.s*
- Vincent Claveau participated in a press conference organized by the CNRS in May 2018
- Vincent Claveau gave an invited talk about NLP and fake news at the Forum des sciences cognitives in Nancy
- Vincent Claveau was heard at the French National Assembly by the parliamentary group *Économie numérique de la donnée, de la connaissance et de l'intelligence artificielle*
- Miaojing Shi was invited for a panel discussion about *China is AI: perspective on the booming Chinese AI ecosystem* at *FranceIsAI*, Oct 2018, Paris.
- Miaojing Shi was invited to the 2nd Edition of the Purple Night organized by the France China Committee in order to value the Franco-Chinese cooperation.

9.3.3. Internal action

- Regional events: Guillaume Gravier was invited conferencer on AI for *Café des Sciences* (general public audience, ~100 pers.)

9.3.4. Creation of media or tools for science outreach

- Cédric Maigrot and Vincent Claveau participated to the educational video from *Cité des Sciences* about Fake News detection <https://bit.ly/2Rz7MAp>

MAGRIT Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. Member of the Organizing Committees

- Fabien Pierre co-organized an ICPR satellite Workshop on Reproducible Research in Pattern Recognition (RRPR 2018, Beijing, China).

9.1.2. Scientific Events Selection

9.1.2.1. Member of the Conference Program Committees

- M.-O. Berger was a member of the program committee of: International Conference on Robotic and automation (ICRA 2018), International Conference on Information Processing in Computer assisted interventions (IPCAI 2018), International Conference on Robotics and Automation (IROS 2018), International Symposium on Mixed and Augmented Reality (ISMAR 2018), International Conference on Pattern Recognition (ICPR 2018).
- Erwan Kerrien was a member of the program committee of MICCAI 2018.
- G. Simon was a member of the program committee of IEEE VR 2019 and IEEE ISMAR 2018
- F. Sur was a member of the program committee of RFIAP 2018 (Reconnaissance des formes, image, apprentissage et perception)

9.1.3. Journal

9.1.3.1. Reviewer - Reviewing Activities

The members of the team reviewed articles in IEEE Transactions on Visualization and Computer Graphics, IEEE Transaction on Image Processing, MDPI Journal of Imaging, Image Processing On Line, Computer Methods and Programms in Biomedicine, Medical Image Analysis.

9.1.4. Invited Talks

- Fabien Pierre gave a talk during a one-day workshop organized in Paris in november 2018 by GDR ISIS. Title : *Géométrie et représentation de la couleur*.
- Pierre-Frederic gave a seminar at the department of information technology of Uppsala University on May 30th. Title: ' Mitral Valve Biomechanical Model Construction ' http://user.it.uu.se/~maya/seminar_abstracts/sem_spring18/PFVillard.html.
- Daryna Pancheva gave a talk at the Harvard Biorobotics Lab on November 19th. Title: 'Automatic Segmentation of Mitral Valve Chordae'.
- Pierre-Frederic Villard gave a talk at the Harvard Biorobotics Lab on November 26th. Title: 'Mitral Valve modeling: from CT scan to FEM model'.

9.1.5. Scientific Expertise

- Marie-Odile Berger is the president of the Association française pour la reconnaissance et l'interprétation des formes (AFRIF).
- Gilles Simon was reviewers for two CIFRE grant proposals (ANR).

9.1.6. Research Administration

- Marie-Odile Berger is a member of the Inria evaluation committee. She was scientific referent for the Evaluation Seminar “Vision, perception and multimedia interpretation”.
- Gilles Simon is Chargé de Mission Loria to take part in an EIT’s KIC (Knowledge and Innovation Communities) proposal in the thematic of manufacturing (KIC Added-value Manufacturing).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

The assistant professors of the MAGRIT team actively teach at Université de Lorraine with an annual number of around 200 teaching hours in computer sciences, some of them being accomplished in the field of image processing. Inria researchers have punctual teaching activities in computer vision and shape recognition mainly in the computer science Master of Nancy and in several Engineering Schools near Nancy (ENSMN Nancy, SUPELEC Metz, ENSG). Our goal is to attract Master students with good skills in applied mathematics towards the field of computer vision.

The list of courses given by staff members which are related to image processing and computer vision is detailed below:

- M.-O. Berger
 - Master : Shape recognition, 15 h, Université de Lorraine.
 - Master : Introduction to image processing, 12 h, École des Mines de Nancy .
 - Master : Image processing for Geosciences, ENSG, 12h.
- E. Kerrien
 - Master : Introduction to image processing, 15 h, École des Mines de Nancy.
- Fabien Pierre
 - Licence: Introduction to image processing and compression, 30h, IUT Saint-Dié des Vosges.
- G. Simon
 - Master: Augmented reality, 24 h, Télécom-Nancy.
 - Master : Augmented reality, 24h, M2 IHM Metz.
 - Master : Augmented reality, 3 h, SUPELEC Metz.
- F. Sur
 - Master: Introduction to machine learning, 50 h, Université de Lorraine.
 - Master : Introduction to signal processing and applications, 21 h, Ecole des Mines de Nancy.
- P.-F. Villard
 - Licence: 3D programming, 16h, IUT Saint-Dié des Vosges.
 - Licence: Game design with Unity3D , 15h, IUT Saint-Dié des Vosges.
 - Licence: Introduction to augmented reality, 4h, IUT Saint-Dié des Vosges.
 - Master : Augmented and Virtual Reality, 16h, M2 Cognitive Sciences and Applications, Institut des Sciences du Digital, Université de Lorraine.

Frédéric Sur was the head of the Industrial Engineering and Applied Mathematics department at Mines Nancy until August 2018.

9.2.2. Supervision

PhD: Antoine Fond, Introduction de sémantique dans la modélisation urbaine dans un contexte de calcul du point de vue, octobre 2014, Marie-Odile Berger, Gilles Simon. PhD defended in avril 2018.

PhD in progress: Jaime Garcia Guevara, Vers une utilisation clinique de la réalité agmentée pour la chirurgie hépatique, octobre 2015, Marie-Odile Berger, Stéphane Cotin (MIMESIS).

PhD in progress: Raffaella Trivisonne, Image-guided real-time simulation using stochastic filtering, novembre 2015, Erwan Kerrien, Stéphane Cotin (MIMESIS).

PhD in progress: Vincent Gaudillière, Reconnaissance de lieux et d'objets pour la réalité augmentée en milieux complexes, décembre 2016, Marie-Odile Berger, Gilles Simon.

PhD in progress: Daryna Panicheva, Image-based Biomechanical Simulation of Mitral Valve Closure, octobre 2017, Marie-Odile Berger, Pierre-Frédéric Villard.

9.2.3. Juries

- Marie-Odile Berger was external reviewer of the PhD of Philippe-Antoine Gohard (Univ. Toulouse), Guillaume Cortes (Univ. Rennes), Giang Nguyen (Univ Paris-Est) and of the HdR of Céline Fouard (Univ. Grenoble). She was examiner of the PhD of Nader Mamoud (Univ. Saragosse) and Alexandre Morgand (Univ. Clermont-Ferrand).
- Erwan Kerrien was external reviewer of the PhD of Mohammad Rezza Maddah (IMT Atlantique and Wright State University).

9.3. Popularization

Members of the team participate on a regular basis, to scientific awareness and mediation actions.

9.3.1. Internal or external Inria responsibilities

Erwan Kerrien is Chargé de Mission for scientific mediation at Inria Nancy-Grand Est, and thereby is part of the Inria scientific mediation network. As such, he is a member of the steering committee of "la Maison pour la Science de Lorraine"⁰, and member of the IREM⁰ steering council. He also serves as the academic referent of an IREM working group aiming at introducing computer science in lower and upper secondary school curricula.

9.3.2. Articles and contents

Erwan Kerrien was interviewed for a special edition of the journal of Nancy University Hospital about AI in medicine.

9.3.3. Education

- Gilles Simon participated to the "Fête de la science 2018" at the Faculté des Sciences et Technologies of the Université de Lorraine. He presented unplugged activities of computer science.
- Pierre-Frédéric Villard participated to open days and science festival in the IUT of Saint-Dié des Vosges. He presented augmented and virtual reality demos and their link to the high school mathematics program.
- Erwan Kerrien participated in the creation of a MOOC for teachers of the new ICN option (Informatique et Création Numérique - *Computer Science and Digital Creation*) at the beginning of high school curriculum (see <https://www.fun-mooc.fr/courses/inria/41014/session01/info>). This MOOC is part of the Class'Code project (<https://pixees.fr/classcode-v2>). During the year, he took his part in the animation and participated in the evolution of this MOOC to adapt to the new SNT

⁰"Houses for Science" project, see <http://maisons-pour-la-science.org/en>

⁰Institut de Recherche sur l'Enseignement des Mathématiques - *Research Institute for Teaching Mathematics*

class (Sciences du Numérique et Technologie - *Digital Science and Technology*) that generalizes ICN, and is included in the 1st year core curriculum in upper secondary education.

He also participated in the creation and teaching, of a 5-day training course for scientific animators (in a broad sense, from science club animators to science teachers). This course was funded by Région Lorraine (see <https://fan.loria.fr>).

He gave a 2-day course about the use of unplugged computer science to introduce computer science in science class, along with another researcher and 2 secondary school maths teachers. This course has been organized with Maison pour la Science since 2015, and is proposed to around 20 maths and science secondary school teachers each year.

9.3.4. Interventions

- Gilles Simon was invited to participate in a round table on geomatics as part of the Saint-Dié-des-Vosges Geography Festival.
- Erwan Kerrien was an associate researcher to a MATH.en.JEANS workshop within Loritz high school in Nancy. He was also part of the organizing committee of the MATH.en.JEANS conference that took place in Nancy, and gathered around 500 pupils and teachers from North-East France, Belgium and Romania. He also proposed computer science unplugged activities to secondary school pupils, especially when around 100 girls were welcome in the Inria Nancy-Grand Est center to celebrate the Ada Lovelace Day.

MORPHEO Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. Reviewer

- Jean-Sébastien Franco reviewed for 3DV, CVPR and ECCV 2018, and the CVPR 2018 Humans Workshop.
- Sergi Pujades reviewed for 3DV.
- Julien Pansiot reviewed for ECCV 2018 and CVPR 2019.
- Stefanie Wuhrer reviewed for CVPR, ECCV, and SIGGRAPH.
- Edmond Boyer reviewed for 3DV, CVPR and RFIAP 2018.
- Edmond Boyer was area chair for BMVC and ECCV 2018.

10.1.2. Journal

10.1.2.1. Member of the Editorial Boards

- Edmond Boyer is associate editor of the International Journal of Computer Vision (Springer).

10.1.2.2. Reviewer - Reviewing Activities

- Stefanie Wuhrer reviewed for IJCV and PAMI.
- Edmond Boyer reviewed for IJCV and PAMI.
- Sergi Pujades reviewed for the Journal of Imaging (MDPI), Sensors and IEEE TVCG.
- Jean-Sébastien Franco reviewed for IEEE Computer Graphics and Applications.

10.1.3. Invited Talks

- Edmond Boyer gave invited talks at: Microsoft Cambridge (visit), Institut Descarte Paris (conférence maths et mouvement), New York University (visit) and Montpellier University (Module Image).

10.1.4. Scientific Expertise

- Jean-Sebastien Franco reviewed for the Euregio Science Fund (EGTC) - Interregional Project Networks (IPN) in 2018.
- Jean-Sebastien Franco was a member of the recruiting committee of Universite Grenoble Alpes for an Assistant Professor position in 2018.
- Jean-Sebastien Franco was a member of the Ensimag Engineering school - Grenoble INP steering committee (Conseil d'École) in 2018.
- Jean-Sebastien Franco was a member of the recruiting committee of Ensimag - Grenoble INP Engineering school for temporary research and teaching associates (ATER) in 2018.
- Sergi Pujades reviewed for the DFG (German ANR).

10.1.5. Research Administration

- Edmond Boyer is auditor for the Computer Vision European Association.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Licence: Jean-Sébastien Franco, Introduction to Imperative Programming, 57h, Ensimag 1st year, Grenoble INP.

Licence: Jean-Sébastien Franco, C Programming project, 27h, Ensimag 3rd year, Grenoble INP.

Master: Jean-Sébastien Franco, Supervision of the 2nd year program (300 students), 36h, Ensimag 2nd year, Grenoble INP.

Master: Jean-Sébastien Franco, Introduction to Computer Graphics, 44h, Ensimag 2nd year, Grenoble INP.

Master: Jean-Sébastien Franco, Introduction to Computer Vision, 27h, Ensimag 3rd year, Grenoble INP.

Master: Jean-Sébastien Franco, End of study project tutoring (PFE), 12h, Ensimag 3rd year, Grenoble INP.

Master: Edmond Boyer, 3D Modeling, 18h, M2R Mosig GVR, Grenoble INP.

Master: Edmond Boyer, Introduction to Visual Computing, 30h, M1 MoSig, Université Grenoble Alpes.

Master: Stefanie Wuhler, 3D Graphics, 13.5h, M1 MoSig and MSIAM, Université Grenoble Alpes.

10.2.2. Supervision

PhD in progress: Victoria Fernandez Abrevaya, 3D Dynamic Human Motion Representations, Université Grenoble Alpes (France), started 01/10/2016, supervised by Edmond Boyer and Stefanie Wuhler.

PhD in progress: Jean Basset, Learning Morphologically Plausible Pose Transfer, Université Grenoble Alpes (France), started 01/10/2018, supervised by Edmond Boyer, Franck Multon and Stefanie Wuhler.

PhD in progress: Abdullah Haroon Rasheed, Cloth Modeling and Simulation, Université Grenoble Alpes (France), started 01/11/2017, supervised by Florence Bertails-Descoubes, Jean-Sébastien Franco and Stefanie Wuhler.

PhD in progress: Jinlong Yang, Learning shape spaces of dressed 3D human models in motion, Université Grenoble Alpes (France), started 01/10/2015, supervised by Franck Hétroy-Wheeler and Stefanie Wuhler.

HdR : Stefanie Wuhler, Deformation Models for Human Shape Analysis, Université Grenoble Alpes (France), September 2018

PhD in progress: Claude Goubet, Dense 4D Modelling of Moving Shapes, Université Grenoble Alpes (France), started 02/10/2017, supervised by Edmond Boyer and Julien Pansiot

PhD in progress: Di Meng, Deep learning for low-dose CBCT reconstruction and registration, Université Grenoble Alpes (France), started 01/10/2018, supervised by Edmond Boyer and Julien Pansiot.

PhD in progress: Matthieu Armando, Temporal Integration for Shape and Appearance Modeling, Université Grenoble Alpes (France), started 01/01/2018, supervised by Edmond Boyer and Jean-Sébastien Franco.

PhD in progress: Vincent Leroy, 4D shape reconstruction from photoconsistency cues, Université Grenoble Alpes, started 01/10/2015, supervised by Edmond Boyer and Jean-Sébastien Franco.

PERCEPTION Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific Events Organisation

8.1.1.1. Member of the Organizing Committees

Xavier Alameda-Pineda organized several workshops in conjunction with IEEE CVPR'18, ECCV'18, and ACM Multimedia'18.

8.1.1.2. Reviewer

Xavier Alameda-Pineda was a reviewer for IEEE CVPR'18, NIPS'18, IEEE ICASSP'18, ACM Multimedia'18 and IEEE ICRA'18.

8.1.2. Journal

8.1.2.1. Member of the Editorial Boards

Radu Horaud is associated editor for the International Journal of Computer Vision and for the IEEE Robotics and Automation Letters.

8.1.2.2. Guest Editor

Xavier Alameda-Pineda was co-guest editor of a special issue of the ACM Transactions on Multimedia Computing Communications and Applications on "Multimodal Understanding of Social, Affective, and Subjective Attributes".

8.1.3. Invited Talks

- Radu Horaud gave an invited talk at the Multimodal Machine Perception Workshop, Google, San Francisco, and at SRI International, Menlo Park, USA, on "Audio-Visual Machine Perception for Human-Robot Interaction".
- Xavier Alameda-Pineda was invited to give a seminar at the University in May 2018 on "Audio-Visual Multiple Speaker Tracking with Robotic Platforms", and
- Xavier Alameda-Pineda gave an invited talk at the SOUND Workshop at Bar-Ilan University, Israel, December 2018 on "Multi-modal Automatic Detection of Social Attractors in Crowded Meetings".

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

- Laurent Girin is professor at Grenoble National Polytechnic Institute (G-INP) where he teaches signal processing and machine learning on the basis of a full professor service (192 hours/year)
- Xavier Alameda-Pineda is involved with the M2 course of the MSIAM Masters Program: "Fundamentals of probabilistic data mining, modeling seminars and projects", for the practical sessions. Xavier is also preparing a doctoral course on "Learning with Multi-Modal data for Scene Understanding and Human-Robot Interaction" to be taught in spring 2019.

8.2.2. Supervision

- Radu Horaud has supervised the following PhD students: Israel Dejene-Gebru [32], Stéphane Lathuilière [33], Benoît Massé [34], Yutong Ban, Guillaume Delorme and Sylvain Guy.
- Xavier Alameda-Pineda has co-supervised Israel Dejene-Gebru, Yutong Ban, Guillaume Delorme and has supervised Yihong Xu.

8.2.3. Juries

Xavier Alameda-Pineda was reviewer and examiner of the PhD dissertations of Wei Wang (now post-doctoral fellow at EPFL) and of Dr. Dan Xu (now post-doctoral fellow at U. Oxford), both at University of Trento, Italy.

SIROCCO Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. Member of the Organizing Committees

- C. Guillemot was tutorial co-chair of IEEE Int. Conf. on Image Processing (ICIP, Athens, 2018)

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

- C. Guillemot has been a member of the international program committee of PCS 2018, ACIVS 2018, VISAP 2018, ICIP 2018
- T. Maugey was publicity chair and member of the technical program committee of the Graph Signal Processing workshop at EPFL (Switzerland) (2018) and area chair of IEEE-VCIP 2018
- A. Roumy has been a member of the technical program committees of the CVPR 2018 workshop on New Trends in Image Restoration and Enhancement (NTIRE), of the ICC 2018 workshop on Promises and Challenges of Machine Learning in Communication Networks (ML4COM), and of the ICT 2018 conference.

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- C. Guillemot is senior area editor of the IEEE Trans. on Image Processing
- C. Guillemot is associate editor of the International Journal on Mathematical Imaging and Vision
- A. Roumy is associate editor of the Springer Annals of Telecommunications.
- A. Roumy is associate editor of the IEEE Trans. on Image Processing (since Nov. 2018)

10.1.4. Invited Talks

- C. Guillemot gave a keynote talk on light fields image processing at COmpression and REpresentation of Audio-visual Signals (CORESA), Poitiers, 14 Nov. 2018.
- C. Guillemot gave an IEEE Distinguished lecture, Computational light field imaging, invited by the Croatian and Slovenian IEEE signal processing chapter, at Ljubljana (23rd Oct. 2018) and Zagreb (24th. Oct. 2018).
- C. Guillemot gave a lecture at the IEEE signal processing summer school at Midsweden University, Sundvall, Sweden, May 2018.
- C. Guillemot gave a seminar at KTH on light field image processing, 23rd March 2018
- C. Guillemot gave an IEEE Distinguished lecture invited by the Italian IEEE signal processing chapter, Cavalese, 22 Jan. 2018
- Thomas Maugey gave a seminar at ENS-Rennes on Free Viewpoint Television, April 2018.
- A. Roumy gave a talk on Source coding under massive random access: theory and applications, at ENSEA, Cergy-Pontoise, April 2018.
- A. Roumy gave a talk on Source coding under massive random access: theory and applications, at INSA, Lyon, Sept. 2018.
- A. Roumy gave a talk on universal compression of images, at EPFL, Dec. 2018.

10.1.5. Leadership within the Scientific Community

- C. Guillemot is member of the IEEE IVMSP technical committee
- C. Guillemot is senior member of the steering committee of IEEE Trans. on Multimedia (2016-2018).
- C. Guillemot has been appointed member of the IEEE Signal Processing Society Nominations and Appointments Committee for a two-year term (2018-2019).
- A. Roumy is a member of the Executive board of the National Research group in Image and Signal Processing (GRETSI).
- A. Roumy is Local Liaison for the European Association for Signal Processing (EURASIP).

10.1.6. Research Administration

- C. Guillemot is a member of Inria evaluation committee
- C. Guillemot is member of the “bureau du Comité des Projets”
- C. Guillemot has served as a member of the selection committee of an Assistant Prof. at Telecom ParisTech (Jan. 2018)
- L. Guillo is a member of the technological development and technology transfer committee at Inria Rennes.
- A. Roumy served as a jury member for the selection of Inria CR (researcher) candidates, Inria, Rennes, France, 2018.
- A. Roumy is a member of the technological development and technology transfer committee at Inria Rennes.
- A. Roumy is a member of the Inria Joint Administrative Committee (CAP commission administrative paritaire).

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

- Master: C. Guillemot, Image and video compression, 10 hours, and advanced video processing, 4 hours, M2 SISEA, Univ. of Rennes 1, France.
- Undergraduate: L. Guillo, course of 35 hours on Functional immutable programming, 1st year of Mathématiques, Informatique, Electronique, mathematique-Economie" (MIEE), Univ. of Rennes 1
- Undergraduate: L. Guillo, talk about agility and software development, 3rd year, ENS Rennes.
- Master: T. Maugey, course on 3D models in a module on advanced video, 4 hours, M2 SISEA, Univ. of Rennes 1, France.
- Master: T. Maugey, course on Representation, editing and perception of digital images, 12 hours, M2 SIF, Univ. of Rennes 1, France.
- Engineering degree: A. Roumy, Sparse methods in image and signal processing, 13 hours, INSA Rennes, 5th year, Mathematical engineering, France.
- Master: A. Roumy, Foundations of smart sensing, 18 hours, ENSAI, Master of Science in Statistics for Smart Data, France.
- Master: A. Roumy, High dimensional statistical learning, 9 hours, University Rennes 1, SIF Master, France.
- Master: A. Roumy, Information theory, 15 hours, University Rennes 1, SIF master, France.

10.2.2. Juries

- C. Guillemot has been member of the PhD committees of:
 - D. Liu, KTH, Stockholm, March 2018

- K. Reuze, INSA, Rennes, Nov. 2018
- S. Ferdowsi, Univ. Geneva, Dec. 2018
- Thomas Maugey has been member of the jury of the PhD committee of:
 - Renata Khasanova, EPFL, Dec. 2018

10.3. Popularization

- C. Guillemot and A. Roumy participated in the editorial board of a series of articles, towards a general audience, on Fourier, in the context of his 250th birth anniversary (2018)

STARS Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

Francois Brémont was a General Chair for the 3rd IEEE International Conference on Image Processing, Applications and Systems (IPAS 2018).

10.1.1.2. Member of Organizing Committees

- Abhijit Das organized 5th Sclera Segmentation Benchmarking Competition 2018, in conjunction with International Conference on Biometrics 2018.
- Abhijit Das organized 1st Thai Student Signature and Name component Recognition and Verification Competition 2018 in conjunction with ICFHR 2018.
- Antitza Dantcheva and Abhijit Das organized Recent Advances in Biometric Technology for Mobile Devices (RABTMD 2018) in conjunction with the 9th IEEE International Conference on Biometrics: Theory, Applications, and Systems BTAS 2018.
- Antitza Dantcheva and Abhijit Das were local organizing co-chairs of IEEE International Conference on Image Processing, Applications and Systems (IPAS 2018).
- Alexandra Konig was member of the organizing committee of RaPID-2018 workshop (Resources and ProcessIng of linguistic, para-linguistic and extra-linguistic Data from people with various forms of cognitive/psychiatric impairments) 8th of May 2018, Miyazaki, Japan.

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

- Antitza Dantcheva was program Co-chair at the International Conference of the Biometrics Special Interest Group (BIOSIG) 2017 and 2018, September, 2018, Darmstadt, Germany.
- Alexandra Konig was program chair of 2nd Workshop on AI for Aging, Rehabilitation and Independent Assisted Living (ARIAL) @IJCAI'18 - In conjunction with 27th International Joint Conference on Artificial Intelligence and the 23rd European Conference on Artificial Intelligence, July 15, 2018, Stockholm, Sweden.

10.1.2.2. Member of Conference Program Committees

- Francois Brémont was program committee member of WACV18.
- Francois Brémont was a member of the AVSS Steering Committee for 2018
- Monique Thonnat was program committee member of the conference ICPRAM 2019
- Antitza Dantcheva was in the technical program committee of the IAPR International Conference on Biometrics (ICB) 2018
- Jean-Paul Rigault is a member of the *Association Internationale pour les Technologies à Objets* (AITO) which organizes international conferences such as ECOOP.

10.1.3. Reviews

- Francois Brémont was reviewer for many journals, such as IEEE Transactions on Circuits and Systems for Video Technology, for the journal *Frontiers in Human Neuroscience*, for the journal "revue *Retraite et société*" and *Medical Engineering & Physics*.

- Antitza Dantcheva was reviewer for a number of journals including IEEE Transactions on Information Forensics and Security (TIFS), IEEE Transactions on Biometrics, Behavior, and Identity Science (T-BIOM), IEEE Transactions on Circuits and Systems for Video Technology (TCSVT), IET Biometrics, Pattern Recognition letters, Pattern Recognition.
- Francois Brémond was reviewer for many conferences including : CVPR2018, ECCV2018, VOT2018, ICCV2018, WACV2018-19, ISG18.
- Monique Thonnat is a reviewer for the journal Artificial Intelligence in Medicine AIIM (Elsevier).
- Sabine Moisan was reviewer for the 10th ICAART'18 International Conference on Agents and Artificial Intelligence.

10.1.4. Member of Editorial Boards

- Francois Brémond has been handling editor of the international journal "Machine Vision and Application" since 2014 and editor of a PANORAMA special issue of Journal of Electronic Imaging Letters (JEL): Ultra Wide Context and Content Aware Imaging.
- Antitza Dantcheva has been in the Editorial Board of the Journal Multimedia Tools and Applications (MTAP) since 2017.

10.1.5. Invited Talks

Francois Brémond was invited by:

- Prof. Vasek Hlavac (Czech Technical University in Prague) to give a talk at the Computer Vision Winter Workshops CVWW in Cesky Krumlov, 5th February 2018.
- Derek J Collins (Huawei) to give a talk at the 3rd Annual Computer Vision / Video Intelligence Forum in Dublin, Oct. 2018.
- Nicolas Padoy (University of Strasbourg) to give a talk at the workshop MCV at CVPR, June 2018
- Dr Lauren CAURO (City of Nice) to give a talk at the workshop "Ethique en santé connectée : La santé connectée, un progrès pour tous? ", 26 Oct 2018
- Christophe ROUSSEAU (University of Nice) to give a talk at the SophIA Summit : IA et vision, 9 Nov 2018
- Monique Thonnat was invited by INGER to give a talk on Monitoring People with Video Analysis at the Franco-Mexican workshop AI Technology Applications and Research on Frailty and Dementia, Mexico, 22-23 November 2018.
- A. Dantcheva. "Facial analysis: from soft biometrics to healthcare" at Information Sciences Institute (ISI) at the University of Southern California (USC), Los Angeles, USA, September 2018.
- A. Dantcheva. "Facial analysis: from biometrics to healthcare" at Institute of Computing Technology (ICT) at the Chinese Academy of Sciences (CAS), Beijing, China, August 2018.
- Monique Thonnat has been invited to give a talk on Activity Recognition for Neurocognitive Disorders at the International Symposium on Smart Healthcare and Age-Friendly by Taichung Veterans General Hospital, Taichung, Taiwan, 4 December 2018.
- Monique Thonnat has been invited by Taipei Medical University to give a talk on An Approach with serious Exergames for Assessment and Stimulation of Patients with Neurocognitive Disorders at Bioinformatics vs Medecine: The Elderly Care in the Information Era, The Needs and Responses, Taipei, Taiwan, 6 December 2018.
- Francois Brémond has been invited to give a talk on Activity Recognition for People Monitoring at the International Symposium on Smart Healthcare and Age-Friendly by Taichung Veterans General Hospital, Taichung, Taiwan, 4 December 2018.
- Francois Brémond has been invited by Taipei Medical University to give a talk on Activity Recognition to Monitor Older People at Bioinformatics vs Medecine: The Elderly Care in the Information Era, The Needs and Responses, Taipei, Taiwan, 6 December 2018.

10.1.6. Leadership within the Scientific Community

- Francois Brémond was a member of the Evaluation Committee (i.e. HCERES) of the research laboratory LIPADE from Paris Descartes University, 15 March 2018.
- Francois Brémond was a member of the Evaluation Committee for the professor position in computer science of Lyon University, April 24th and May 15th 2018.
- Francois Brémond was a Reviewer for the AME Programmatic Proposal "Human-Robot Collaborative AI for Advanced Manufacturing and Engineering" on behalf of (A*STAR) Singapore, 30th May 2018.
- Francois Brémond was an expert for a research program at the Campus for Research Excellence and Technological Enterprise (CREATE) from the National University of Singapore (NUS), Oct 2018.
- Francois Brémond was the working group Leader for reviewing a new Inria Project Team Proposal: CHORALE
- Francois Brémond is part of the Advisory Board of the V4Design EU project for the Horizon 2020 framework, ICT-20-2017 Call, Tools for smart digital content in the creative industries, 2018-21
- Antitza Dantcheva serves in the Technical Activities Committee of the IEEE Biometrics Council since 2017
- Antitza Dantcheva serves in the EURASIP Biomedical Image & Signal Analytics (BISA) SAT 2018-2021
- Antitza Dantcheva is member of the European Reference Network for Critical Infrastructure Protection (ERNICIP), Thematic Group Extended Virtual Fencing - use of biometric and video technologies, since 2017
- Antitza Dantcheva is member of the European Association for Biometrics, since 2018

10.2. Teaching - Supervision - Juries

10.2.1. Supervision

- PhD: Guillaume Sacco, Serious video games in gerontological practice: application to relationships between physical activity and cognition, Thèses, Université Côte d'Azur, June 2018.
- PhD: F. NEGIN, Toward Unsupervised Human Activity and Gesture Recognition in Videos, Theses, Université Côte d'Azur, Sep 2018.
- PhD: L. A. NGUYEN, Long-term people trackers for video monitoring systems, Theses, Université Côte d'Azur, July 2018.
- PhD: M. K. PHAN TRAN, Maintaining the engagement of older adults with dementia while interacting with serious game, Theses, Université Côte d'Azur, April 2017,

10.2.2. Juries

Francois Brémond was part of several PhD and HDR Juries :

- Nicolas Padoy, HDR, University of Strasbourg, 19 January 2018
- Renato Baptista, University of Luxembourg, 29 January 2018
- Nicolas Chesneau, Inria Lear, Grenoble, 23 February 2018
- Dinh Van Nguyen, UPMC, Paris, 2 May 2018
- Riadh Ksantini, HDR, SUP'COM Tunis, 10 September 2018
- Yiqiang Chen, LIRIS, University of Lyon, 12 October 2018
- Katy Blanc, University of Nice, 17 December 2018
- Mohamed Adel Benamara, LIRIS, University of Lyon, 19 December 2018

Monique Thonnat was member of the selection board of professor PU27 at ENIB, Brest.

Monique Thonnat is member of the scientific board of ENPC, Ecole Nationale des Ponts et Chaussées since June 2008.

THOTH Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- C. Schmid is one of the general chairs for ECCV 2020.

10.1.1.2. Member of the Organizing Committees

- Several permanent members of the team co-organized the international summer school PAISS 2018.
- J. Mairal is a member of the organizing committee for the international conference SIAM Imaging Science 2020.
- J. Mairal co-organized the Journées SMAI-MODE, which will take place in March 2018.
- J. Mairal is a co-organizer of the workshop OSL'19 at Les Houches.
- G. Rogez was one of the organizers of the CVPR workshop on Human Pose, Motion, Activities and Shape in 3D (3D HUMANS 2018).
- C. Schmid was one of the organizers of Workshop on Artificial Intelligence, Horizon Maths, Paris, 2018.

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

- K. Alahari: Area chair for CVPR 2018, ICCV 2019.
- K. Alahari: Senior program committee member for IJCAI 2018, IJCAI 2019.
- J. Mairal: Area chair for ICML and NeurIPS 2018.
- C. Schmid: Area chair for NeurIPS 2018, ICML 2018, ECCV 2018, ICCV 2019.
- J. Verbeek: Area chair for ECCV 2018, ICCV 2019.

10.1.2.2. Reviewer

The permanent members of the team reviewed numerous papers for numerous international conferences in computer vision and machine learning, including CVPR, ECCV, NeurIPS, ICML.

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- K. Alahari: Associate editor for Computer Vision and Image Understanding journal, since 2018.
- J. Mairal: Associate editor of the International Journal of Computer Vision, since 2015.
- J. Mairal: Associate editor of Journal of Mathematical Imaging and Vision, since 2015.
- J. Mairal: Associate editor of the SIAM Journal of Imaging Science, since 2018.
- C. Schmid: Editor in Chief of the International Journal of Computer Vision, since 2013.
- C. Schmid: Associate editor for Foundations and Trends in Computer Graphics and Vision, since 2005.
- J. Verbeek: Associate editor for Image and Vision Computing Journal, 2011-2018.
- J. Verbeek: Associate editor for International Journal on Computer Vision, since 2014.
- J. Verbeek: Associate editor for IEEE Transactions Pattern Analysis and Machine Intelligence, since 2018.

10.1.3.2. Reviewer - Reviewing Activities

The permanent members of the team reviewed numerous papers for numerous international journals in computer vision (IJCV, PAMI, CVIU), machine learning (JMLR, Machine Learning). Some of them also review for journals in optimization (SIAM Journal on Optimization, Mathematical Programming), image processing (SIAM Imaging Science).

10.1.4. Invited Talks

- K. Alahari: Invited talk at IISc Bangalore, India, Dec 2018.
- K. Alahari: Invited talk at Hyderabad AI Symposium, India, Dec 2018.
- K. Alahari: Invited seminar at Simon Fraser Univ., Vancouver, Canada, Nov 2018.
- K. Alahari: Invited seminar at POSTECH, Pohang, South Korea, Oct 2018.
- K. Alahari: COVIEW workshop, ACM Multimedia, Seoul, South Korea, Oct 2018.
- K. Alahari: Le Futur des Images workshop, IXXI, Lyon, Oct 2018.
- K. Alahari: Invited seminar at Universidad de Malaga, Apr 2018.
- K. Alahari: CVPR AC Meeting, Toronto, Feb 2018.
- A. Bietti: Séminaire de statistiques et machine learning, Telecom ParisTech.
- A. Bietti: Laplace reading group, ENS Paris.
- A. Bietti: Grenoble Optimization Days, LJK, UGA.
- G. Durif: Seminar at LJK, UGA, May 2018.
- G. Durif: Seminar at Institut de Recherche Mathématique Avancée (IRMA), Strasbourg Univ., June 2018.
- M. Elbayad: Seminar at NAVER LABS Europe, Grenoble, Sep 2018.
- P. Luc: Invited talk in the class “Deep Learning for Image Analysis” at Ecole des Mines.
- J. Mairal: Séminaire Parisien d’Optimisation, Paris.
- J. Mairal: Workshop on the Future of Random Projections, Paris.
- J. Mairal: talk in mini-symposium at ISMP, Bordeaux.
- J. Mairal: keynote in Theory of Deep Learning Workshop, ICML 2018, Stockholm.
- J. Mairal: keynote in CEFRL workshop, ECCV 2018, Munich.
- J. Mairal: invited speaker at AI and ML workshop, Telecom ParisTech.
- J. Mairal: Seminar, Gatsby Unit, UCL, London.
- J. Mairal: Seminar, College de France, Paris.
- J. Mairal: Seminar, University of Geneva.
- J. Mairal: Seminar, Université d’Avignon.
- J. Mairal: Seminar, Université de Marseille.
- G. Rogez: Invited speaker, Apple Seminar, Salt Lake City, June 2018.
- G. Rogez: Seminar, NAVER LABS Europe, Grenoble, December 2018.
- C. Schmid: Invited speaker at the Google Multimodal Machine Perception Workshop, San Francisco, October 2018.
- C. Schmid: Invited speaker, “What is optical flow for?” workshop at ECCV, September 2018.
- C. Schmid: Invited speaker, 3rd Intl. Workshop on Video Segmentation at ECCV, September 2018.
- C. Schmid: Keynote speaker at Deep Learning Conference, Rennes, September 2018.
- C. Schmid: Keynote speaker at ActivityNet workshop, in conjunction with CVPR, June 2018.
- C. Schmid: Invited talk at CVPR Good Citizen of CVPR event, in conjunction with CVPR, June 2018.
- C. Schmid: Keynote speaker at 3D Humans workkshop, in conjunction with CVPR, June 2018.
- C. Schmid: Invited speaker at Symposium on AI, Académie des sciences, Paris, February 2018.
- C. Schmid: Presentation at Prairie/industry meeting, Paris, December 2018.
- C. Schmid: Presentation at Google workshop on 3D Deep Learning, October 2018.

- C. Schmid: Seminar for AI residents, Google Mountain View, June 2018.
- C. Schmid: Seminar at MPI Tübingen, April 2018.
- C. Schmid: Seminars at Google Zürich (April), Mountain View and Paris (March).
- C. Schmid: Seminar at Leopoldina section meeting, Ulm, February 2018.
- J. Verbeek: Seminar Facebook AI Research, Paris, December 2018.
- J. Verbeek: Seminar NAVER LABS Europe, Grenoble, December 2018.
- J. Verbeek: Seminar Univ. Amsterdam, July 2018.
- J. Verbeek: Workshop Mathematics and Deep Learning at Univ. Aix-Marseille, November 2018.
- J. Verbeek: ARC6 Deep Learning & Deep Reinforcement Learning Workshop, Lyon.

10.1.5. Scientific Expertise

- J. Mairal: Reviewer for ERC (Consolidator and Starting).
- J. Mairal: Panel member for ANR.
- J. Mairal: Judge for the IBM Watson AI Xprize.
- G. Rogez: reviewer for ANR.

10.1.6. Research Administration

- J. Mairal: Participation in the setting up of the 3IA institute in Grenoble.
- C. Schmid: Member, board of directors of the Computer Vision Foundation (CVF), since 2016.
- C. Schmid: Member, PAMI-TC awards committee and the PAMI-TC executive committee.
- J. Verbeek: Member, 2018 recruitment committee for an Assistant Professor position at Univ. Grenoble Alpes, Laboratoire Jean Kuntzmann (LJK).
- J. Verbeek: Member, steering committee MinaLogic, innovation cluster for digital technologies based in France's Auvergne-Rhône-Alpes region, since 2018.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Doctorat: K. Alahari, Lecturer at the CVIT summer school on machine learning, 4h eqTD, IIIT Hyderabad, India.

Doctorat: A. Bietti, Mini-course "Optimization for large-scale machine learning", 10h eqTD, conference SMAI-MODE, Autrans, France.

Doctorat: J. Mairal, Mini-course "Optimization for large-scale machine learning", 10h eqTD, conference SMAI-MODE, Autrans, France.

Doctorat: J. Mairal, Mini-course "Optimization for large-scale machine learning", 4.5h eqTD, conference Mascot-Num, Nantes, France.

Doctorat: J. Mairal, Lecturer at the YSU - ISTC Joint Summer School on Machine Learning, 12h eqTD, Yerevan, Armenia.

Doctorat: J. Mairal, Lecturer at the PAISS summer school, 2h eqTD, Grenoble, France.

Doctorat: C. Schmid, Course on action recognition, 2h eqTD, PRAIRIE Artificial Intelligence Summer School, July 2018, Grenoble, France.

Master: K. Alahari, Understanding Big Visual Data, 13.5h eqTD, M2, Grenoble INP, France.

Master: K. Alahari, Graphical Models Inference and Learning, 18h eqTD, M2, CentraleSupélec, Paris, France.

Master: K. Alahari, Introduction to computer vision, 9h eqTD, M1, ENS Paris, France.

Master: J. Mairal, Kernel methods for statistical learning, 15h eqTD, M2, Ecole Normale Supérieure, Cachan, France.

Master: C. Schmid, Object recognition and computer vision, 9h eqTD, M2, ENS Paris, France

Master: J. Verbeek, K. Alahari, C. Schmid, Machine Learning and Object Recognition, 27h eqTD, M2, Grenoble University, France

Master: J. Verbeek and J. Mairal, Advanced Learning Models, 27h eqTD, M2, UGA, Grenoble.

10.2.2. Supervision

PhD: N. Chesneau, Learning to Recognize Actions with Weak Supervision, Univ. Grenoble Alpes, Feb 2018, Karteek Alahari and Cordelia Schmid.

PhD: A. Mensch, Apprentissage de représentations en imagerie fonctionnelle, Univ. Paris-Saclay, Sep 2018, Gael Varoquaux, Bertrand Thirion and Julien Mairal.

PhD: P. Tokmakov, Apprentissage à partir du mouvement, Univ. Grenoble Alpes, Jun 2018, Karteek Alahari and Cordelia Schmid.

10.2.3. Juries

K. Alahari: Mostafa S. Ibrahim, November 2018, external examiner, Simon Fraser University.

K. Alahari: Ignacio Rocco Spemolla, 2018, member of “comité de suivi de thèse”, ENS Paris.

J. Mairal: Magda Gregorova, 2018, rapporteur, University of Geneva.

J. Mairal: Saeed Varasteh, December 2018, examinateur, Univ. Grenoble Alpes.

J. Mairal: Olga Permiakova, November 2018, member of “comité de suivi de thèse”, Univ. Grenoble Alpes.

J. Mairal: Vincent Prost, November 2018, member of “comité de suivi de thèse”, Univ. Paris Saclay.

G. Rogez: Francisco Castro, December 2018, jury member, Univ. Malaga.

C. Schmid: Jean-Baptiste Alayrac, September 2018, examinateur, ENS Paris.

C. Schmid: Stéphane Lathuilière, May 2018, presidente, UGA.

C. Schmid: Gunnar Atli Sigurdsson, May 2018, thesis proposal, CMU.

C. Schmid: Christoph Lassner, April 2018, rapporteur, Universitaet Tuebingen.

C. Schmid: Maxime Oquab, January 2018, examinateur, ENS Paris.

J. Verbeek: Riccardo Del Chiaro, 2018-2020, member of supervisory committee, Univ. Florence.

J. Verbeek: Fabien Baradel, 2017-2019, member of supervisory committee, INSA Lyon.

J. Verbeek: Mélanie Ducoffe, 2018, rapporteur, Univ. Côte d’Azur, Sophia-Antipolis.

10.3. Popularization

- P. Luc: Interviews with “Computer Vision News” and “Les Echos Start”.
- J. Mairal: intervention grand public sur l’IA lors d’un événement organisé par PWN (Professional Woman Network) à Lyon en octobre 2018.
- J. Mairal: conférence grand public sur l’IA avec Cédric Villani en juin 2018, mairie de Lyon.
- J. Mairal: participation à un débat public sur l’IA organisé par Mme la député Cendra Motin en avril 2018, Montalieu-Vercieu.

10.3.1. Internal or external Inria responsibilities

- C. Schmid: Member, “Comité scientifique”, Inria Grenoble, since 2015.
- J. Verbeek: Scientific correspondent, national project calls, Inria Grenoble, since 2017.
- J. Verbeek: Member, Inria Grenoble working group on HPC - Big Data - Machine learning, since 2018.

WILLOW Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- I. Laptev was program co-chair of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018.

10.1.1.2. Member of the Organizing Committees

- G. Varol and Y. Hasson are co-organizers of “Women in Computer Vision Workshop” at European Conference on Computer Vision (ECCV), 2018.
- I. Laptev and J. Sivic were co-organizers of “Fine-grained instructional video understanding workshop” at IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018.

10.1.2. Scientific Events Selection

10.1.2.1. Area chairs

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018 (J. Sivic).
- European Conference on Computer Vision (ECCV), 2018 (I. Laptev, J. Sivic).

10.1.2.2. Member of the Conference Program Committees / reviewer

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018 (J.-B. Alayrac, M. Oquab, R. Rezende, I. Rocco, G. Varol).
- European Conference on Computer Vision (ECCV), 2018 (A. Miech, G. Varol, I. Rocco, S. Zagaryuko).
- Neural Information Processing Systems (NIPS), 2018 (J. Sivic).
- Asian Conference on Computer Vision (ACCV), 2018 (G. Varol).

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- International Journal of Computer Vision (I. Laptev, J. Ponce, J. Sivic).
- IEEE Transactions on Pattern Analysis and Machine Intelligence (I. Laptev, J. Sivic).
- Foundations and Trends in Computer Graphics and Vision (J. Ponce).

10.1.3.2. Reviewer - Reviewing Activities

- International Journal of Computer Vision (G. Cheron, M. Trager, G. Varol).
- IEEE Transactions on Pattern Analysis and Machine Intelligence (J.-B. Alayrac, G. Cheron, M. Trager, G. Varol).
- IEEE Transactions on Circuits and Systems for Video Technology (G. Varol).

10.1.4. Other

- J. Sivic is senior fellow of the Neural Computation and Adaptive Perception program of the Canadian Institute of Advanced Research.

10.1.5. Invited Talks

- I. Laptev, Keynote, ICCVG, Warsaw, September, 2018.

- I. Laptev, Invited talk, EPIC Workshop in conjunction with ECCV'18, Munich, September 2018.
- I. Laptev, Tutorial, BMVC'18, Newcastle, September 2018.
- I. Laptev, Invited talk, Workshop on Brave New Ideas for Video Understanding, in conjunction with CVPR'18, Salt Lake City, June 2018.
- I. Laptev, Invited talk, Journee AI, SAFRAN, Paris, June 2018.
- I. Laptev, Invited talk, Integrating Vision and Language, Tartu, March 2018.
- I. Laptev, Keynote, 36th Annual Swedish Symposium on Image Analysis, Stockholm, March 2018.
- A. Miech, Invited talk, LSCP-ENS seminar, Paris, March 2018.
- A. Miech, Invited talk, Google, Paris, July 2018.
- A. Miech, Invited talk, Google, Mountain View, July 2018.
- A. Miech, Invited talk, Paris ML Meetup, University of Bristol Computer Vision Seminar, Bristol, UK, November 2018.
- J. Ponce, Artificial Intelligence, French-American Joint Committee Meeting on Science and Technology, College de France, March 9, 2018.
- J. Ponce, Weakly supervised structure discovery in images and videos, Intelligent robots: autonomy and vision, NYU Abu Dhabi, March 13, 2018.
- J. Ponce, From vision and robotics to artificial intelligence, Robotics AI: Data science vs motion intelligence symposium co-organized by the French and German Academies of Sciences, Sep. 5, 2018.
- J. Ponce, Shape, contours, cameras and eyes, Workshop in honor of Jan Koenderink, UC Berkeley, UC Berkeley, Oct. 24.
- J. Ponce, Weakly supervised structure discovery in images and videos, NYU Tandon School of Engineering, New York, Nov. 2, 2018.
- J. Ponce, Computer vision and visual recognition: historical perspective, new results and challenges, University of Zagreb, Zagreb, Croatia, Nov. 9, 2018.
- J. Sivic, Invited talk, Paris Sciences et Data, PSL, 02/2018.
- J. Sivic, Invited talk, AIME@CZ - Czech workshop on applied mathematics in engineering, Czech Technical University, 02/2018.
- J. Sivic, Invited talk, Deep Learning Workshop, CVPR 2018, Salt Lake City, June 2018.
- J. Sivic, Invited talk, Landmark Recognition Workshop, CVPR 2018, Salt Lake City, June 2018.
- J. Sivic, Seminar, UC Berkeley, June 2018.
- J. Sivic, Invited talk, Workshop on YouTube-8M Large-Scale Video Understanding, ECCV 2018, Munich, September 2018.
- J. Sivic, Invited talk, Prague Informatics Seminar, Charles University, Prague, April 2018.
- G. Varol, Invited talk, MPI for Informatics, Saarbrücken, Germany 11/2018.
- G. Varol, Invited talk, Istanbul Technical University, Istanbul, Turkey 10/2018.
- G. Varol, Invited talk, Deep Learning Meetup at Station F, Paris, France 09/2018.
- G. Varol, Invited talk, BNP Paribas - Prairie Summer School, Paris, France 08/2018.
- G. Varol, Invited talk, CTU Center for Machine Perception, Prague, Czech Republic 06/2018.
- G. Varol, Invited talk, MPI for Intelligent Systems, Tübingen, Germany 04/2018.

10.1.6. Leadership within the Scientific Community

- Member of the advisory board for the IBM Watson AI Xprize (J. Ponce).
- Member of the steering committee of France AI (J. Ponce).
- Member, advisory board, Computer Vision Foundation (J. Sivic).

10.1.7. Scientific Expertise

- J. Ponce, coordinator of the AI theme for the joint French-American Committee on Science and Technology, 2018-.

10.1.8. Research Administration

- Member, Bureau du comité des projets, Inria, Paris (J. Ponce)
- Member, Scientific academic council, PSL Research University (J. Ponce)
- Member, Research representative committee, PSL Research University (J. Ponce).
- Member of Inria Commission de developpement technologique (CDT), 2012-2018 (J. Sivic).
- Member of the Hiring Committe for the tenure track position at CentraleSupélec (I. Laptev).
- Member of the Hiring Committee for Professor of Computer Vision at CentraleSupélec (I. Laptev).

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

- Master : M. Aubry, K. Alahari, I. Laptev and J. Sivic "Introduction to computer vision", M1, Ecole normale superieure, 36h.
- Master : I. Laptev, J. Ponce and J. Sivic (together with C. Schmid, Inria Grenoble), "Object recognition and computer vision", M2, Ecole normale superieure, and MVA, Ecole normale superieure de Cachan, 36h.
- J. Ponce co-organized the PRAIRIE AI Summer School, Grenoble, 2018, which brought together 200 participants representing 44 different nationalities, and selected from 700 applications, with 60% students, 15% academics, and 25% industrials. 25% of these participants were women.

10.2.2. Supervision

PhD : Jean-Baptiste Alayrac, "Structured Learning from Videos and Language", graduated in September 2018, I. Laptev, J. Sivic and S. Lacoste-Julien (Inria SIERRA / U. Montreal).

PhD : Guilhem Cheron, "Structured modeling and recognition of human actions in video", graduated in Dec 2018, I. Laptev and C. Schmid.

PhD : Maxime Oquab, "Convolutional neural networks: towards less supervision for visual recognition", defended on 26 January 2018, L. Bottou (Facebook AI Research), I. Laptev and J. Sivic.

PhD : Matthew Trager, "Cameras, Shapes, and Contours: Geometric Models in Computer Vision", graduated in 2018, J. Ponce and M. Hebert (CMU).

PhD : Tuang Hung VU, "Learning visual models for person detection and action prediction", graduated in 2018, I. Laptev.

PhD in progress : Vo Van Huy, started in Dec 2018, J. Ponce.

PhD in progress : Robin Strudel, "Learning and transferring complex robot skills from human demonstrations", started in Oct 2018, I. Laptev, C. Schmid and J. Sivic.

PhD in progress : Yann Labbe, "Generalizing robotic sensorimotor skills to new tasks and environments", started in Oct 2018, J. Sivic and I. Laptev.

PhD in progress : Thomas Eboli, started in Oct 2017, J. Ponce.

PhD in progress : Zongmian Li, "Learning to manipulate objects from instructional videos", started in Oct 2017, I. Laptev, J. Sivic and N. Mansard (LAAS/CNRS, Toulouse).

PhD in progress : Yana Hasson, started in Nov 2017, I. Laptev and C. Schmid.

PhD in progress : Dmitry Zhukov, "Learning from instruction videos for personal assistants", started in Oct 2017, I. Laptev and J. Sivic.

PhD in progress : Ignacio Rocco, “Estimating correspondence between images via convolutional neural networks”, started in Jan 2017, J. Sivic, R. Arandjelovic (Google DeepMind).

PhD in progress : Antoine Miech, “Understanding long-term temporal structure of videos”, started in Oct 2016, I. Laptev, J. Sivic, P. Bojanowski (Facebook AI Research).

PhD in progress : Gul Varol, “Deep learning methods for video interpretation”, started in Oct 2015, I. Laptev, C. Schmid.

PhD in progress : Julia Peyre, “Learning to reason about scenes from images and language”, started in Oct 2015, C. Schmid, I. Laptev, J. Sivic.

PhD in progress : Theophile Dalens, “Learning to analyze and reconstruct architectural scenes”, starting in Jan 2015, M. Aubry and J. Sivic.

10.2.3. *Juries*

PhD thesis committee:

- Taylor MORDAN, Sorbonne Universite, France, 2018, (J. Sivic, rapporteur).
- Stephane LATHUILIERE, Universite Grenoble Alpes, France, 2018, (J. Sivic, rapporteur).
- Tuan-Hung VU, PSL University, France, 2018, (J. Sivic, examinateur).
- Siddhartha Chandra, CentraleSupélec, France, 2018, (I. Laptev examinateur).
- Sergey Zagoruyko, Université Paris-Est, France, 2018, (I. Laptev examinateur).
- Joris Guerin, Arts et Metiers ParisTech, France, 2018, (I. Laptev examinateur).
- Guilhem Cheron, PSL, France, 2018, (J. Ponce examinateur).
- Pavel Tokmakov, Universite Grenoble Alpes, France, 2018, (J. Ponce examinateur).

10.3. Popularization

10.3.1. *Articles and contents*

- J. Ponce was the subject of an article in the photography magazine Polka. He was also interviewed by France Culture, Le Monde, Paris-Match, Québec Science, and Science et Vie.
- J. Ponce was interviewed by the Académie des Sciences working group on Artificial Intelligence on Oct. 2, 2018.

10.3.2. *Interventions*

- J. Ponce participated in round tables about AI at the France Culture Forum in Paris, March 1, 2018, at the BNP Parisbas summer school Aug. 23, 2018, at the French embassy in Berlin on Nov. 6, 2018, at the Erasme-Descartes conference in Paris on Nov. 15, 2018, and at the AI summit in New York City on Dec. 6, 2018.
- J. Ponce gave general audience lectures at the X-IA meeting in Palaiseau, Oct. 8, 2018 and at the Institut français de Croatie in Zagreb, Croatia, Nov. 9, 2018.

10.3.3. *Creation of media or tools for science outreach*

- I. Laptev, Y. Hasson, S. Allayen, T. Eboli, I. Kalyevath, Y. Labbe, R. Strudel, G. Varol, D. Zhukov, Presentation of computer vision for high-school students, Inria, December 2018.