

Activity Report 2013

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Edition: 2014-03-19

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ATEAMS Project-Team

7. Dissemination

7.1. Scientific Animation

- Jan van Eijck: Member of the NWO committee "Vrije Competitie" for Computer Science.
- Jan van Eijck: Member of the Advisory Board ('Raad van Advies') of the Artificial Intelligence Curriculum, University of Groningen (since Summer 2013).
- Jan van Eijck: Program committee Tenth International Conference on Computational Semantics (IWCS) University of Potsdam, Germany, March 2013
- Jan van Eijck: Program committee LORI-4 (4th International Workshop on Logic, Rationality and Interaction),
- Jan van Eijck : Program committee TTNLS-2014 (Type Theory for Natural Language Semantics)
- Jan van Eijck: Editor of Journal of Logics and their Applications (new IfCoLog journal with open access, to be published by College Publications).
- Jan van Eijck: Reviewer Artificial Intelligence
- Jan van Eijck : Reviewer ESSLLI
- Jan van Eijck: Reviewer Journal of Semantics,
- Jan van Eijck: Reviewer Journal of Logic and Computation
- Jan van Eijck: Reviewer Fundamenta Informaticae
- Jan van Eijck : Reviewer Synthese,
- Jan van Eijck : Reviewer Journal of Philosophical Logic
- Jan van Eijck: Reviewer Journal of Logic Language and Information
- Jan van Eijck : Reviewer Cambridge University Press
- Jan van Eijck : Reviewer Studia Logica.
- Mark Hills: Program committee Working Conference on Reverse Engineering (WCRE/CSMR)
 Tool-track
- Mark Hills: Reviewer International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)
- Mark Hills: Program committee CALCO Tools
- Paul Klint : Editor Science of Computer Programming
- Paul Klint : Editor Springer Service Science Book Series
- Paul Klint: Visiting Professor University of London, Royal Holloway
- Paul Klint: Treasurer European Association for Programming Languages and Systems (EAPLS)
- Paul Klint : Steering committee member ETAPS
- Paul Klint : Board member Instituut voor Programmatuur en Architectuur (IPA)
- Paul Klint : External advisor PlanComps project (UK)
- Paul Klint: Full Professor at UvA, Software Engineering Chair
- Paul Klint: Director Master Software Engineering, UvA
- Paul Klint : Program committee Software Language Engineering (SLE)
- Paul Klint: Program committee Scalable Language Specifications (SLS 2013)
- Paul Klint: Program committee WasDETT 2013

- Paul Klint: Program committee CSMR WCRE ERA 2014
- Paul Klint: EAPLS PhD Awards 2013
- Atze van der Ploeg: Reviewer Journal of Universal Computer Science
- Tijs van der Storm : Program committee International Workshop on Advanced Software Development Tools and Techniques (WASDeTT)
- Tijs van der Storm : Program committee International Conference on Generative Programming: Concepts & Experiences (GPCE)
- Tijs van der Storm : Program committee Working Conference on Reverse Engineering (WCRE/CSMR) Tool-track
- Tijs van der Storm : Reviewer ACM Conference on Object-Oriented Programming Systems, Languages and Applications (OOPSLA)
- Tijs van der Storm : Reviewer ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL)
- Tijs van der Storm : Member working group IFIP TC2 WGLD 2.16: Working Group on Language Design
- Tijs van der Storm : Reviewer Science of Computer Programming
- Tijs van der Storm : Reviewer Journal of Systems and Software
- Tijs van der Storm: Co-organizer Lorentz Workshop on Language Interaction Design (LIXD)
- Tijs van der Storm : Co-organizer 1st Dutch Conference on Software Development Automation (SDA'13)
- Tijs van der Storm : Co-organizer CWI Scientific Meetings
- Tijs van der Storm : Organizer Normalized Systems Seminar
- Jurgen Vinju: Member steering committee IEEE International Workshop on Source Code Analysis and Manipulation (SCAM)
- Jurgen Vinju: General Chair IEEE International Workshop on Source Code Analysis and Manipulation (SCAM)
- Jurgen Vinju: Observer IFIP TC2 Working Group 2.3 Programming Methodology
- Jurgen Vinju: Program chair International Workshop on Advanced Software Development Tools and Techniques (WASDeTT)
- Jurgen Vinju: Program committee International Conference on Model Transformation (ICMT)
- Jurgen Vinju: Program committee chair WCRE/CSMR Tool Track
- Jurgen Vinju: Organizer International Workshop on Parsing@SLE
- Jurgen Vinju: Program committee WCRE/CSMR ERA track
- Vadim Zaytsev: Steering committee Seminar Series on Advanced Techniques & Tools for Software Evolution (SATToSE)
- Vadim Zaytsev: Program committee Software Quality Management (SQM)
- Vadim Zaytsev: Program committee IEEE International Workshop on Source Code Analysis and Manipulation (SCAM)
- Vadim Zaytsev: Program committee Extreme Modeling Workshop (XM)
- Vadim Zaytsev: Judging committee ACM Student Research Competition
- Vadim Zaytsev: Program committee co-chair Working Conference on Reverse Engineering (WCRE/CSMR) Tool-track
- Vadim Zaytsev: Reviewer Science of Computer Programming
- Vadim Zaytsev: Workshop co-chair Open and Original Problems in Software Language Engineering (OOPSLE)

- Vadim Zaytsev : Social media co-chair ACM/IEEE 17th International Conference on Model Driven Engineering Languages and Systems (MoDELS)
- Vadim Zaytsev: Colloquium organiser of Programming Environment Meetings (PEM)

7.2. Teaching - Supervision - Juries

7.2.1. Teaching

Master : Jurgen Vinju, Paul Klint, Software Evolution, 6 EC, Universiteit van Amsterdam, The Netherlands

Master : Tijs van der Storm, Jurgen Vinju, Software Construction, 6 EC, Universiteit van Amsterdam, The Netherlands

Master : Jan van Eijck, Bert Lisser, Vadim Zaytsev, Software Testing, 6 EC, Universiteit van Amsterdam, The Netherlands

Master : Jan van Eijck, Functional Algorithm Specification, 6 EC, Universiteit van Amsterdam, The Netherlands

7.2.2. Supervision

PhD in progress: Paul Griffioen, Next Generation Computational Auditing, started 2011, supervisors Paul Klint, Philip Elsas

PhD in progress : Anastasia Izmaylova, A General Language Parametric Framework for Software Refactoring, started 2011, supervisors Paul Klint, Jurgen Vinju

PhD in progress: Jeroen van den Bos, Digital Forensics Software Engineering, started 2010, supervisors Paul Klint, Tijs van der Storm

PhD in progress: Atze van der Ploeg, Rapid Language Parametric Prototyping of Software Visualization and Exploration, started 2011, supervisor Paul Klint, Tijs van der Storm

PhD in progress: Davy Landman, Recovery and Synthesis of Domain Specific Language Design, started 2011, supervisors Jurgen Vinju, Paul Klint, supervisors Jurgen Vinju.

PhD in progress : Riemer van Rozen, Software Engineering Principles for the Gaming Domain, started 2011, supervisor Paul Klint, Tijs van der Storm

PhD in progress : Ali Afroozeh, Ambiguity and Disambiguation for Context-free Grammars, started 2012, supervisor Jurgen Vinju

PhD in progress : Pablo Inostroza Valdera, Rich UIs for Domain-Specific Languages, started 2013, supervisor Tijs van der Storm

PhD in progress: Ashim Shahi, Principled Quality Assessment of Software, started 2012, supervisor Paul Klint, Jurgen Vinju

PhD in progress: Michael Steindorfer, Scaling meta-programming to data-programming, started 2012, supervisor Paul Klint, Jurgen Vinju

Paul Klint, Jurgen Vinju, Tijs van der Storm, Mark Hills, Jeroen van den Bos and Jan van Eijck together also supervised more than 30 master thesis projects for Universiteit van Amsterdam in 2013.

7.2.3. Juries

- Jan van Eijck, PhD: Arno Bastenhof, Universiteit Utrecht, The Netherlands
- Jan van Eijck, PhD: Frédéric Moisan, Université de Toulouse, France
- Paul Klint, Phd: Romulo Goncalvez, Universiteit van Amsterdam, The Netherlands
- Jurgen Vinju, PhD: C.P.T. de Gouw, Universiteit Leiden, The Netherlands.

7.3. Popularization

- Jan van Eijck: "Why Learn Haskell?", Talk for UvA Programming Summer School, Amsterdam, July 2, 2013.
- Paul Klint, Davy Landman: "Hoe ontstond de eerste computer?" ("The origin of the first computer"), Public lecture for broad audience, NEMO, Amsterdam.
- Paul Klint, "How to test a meta-program?", invited talk at the Workshop on Scalable Language Specification (SLS 2013).
- Paul Klint, "BaMa: Key to the Future?", invited talk at IW1010: 10 Years of UvA Information Sciences, Amsterdam
- Paul Klint, "Understanding the Quality of Open Source Projects", invited talk at SATToSe, Bern
- Davy Landman: "What Does Control Flow Really Look Like? Eyeballing the Cyclomatic Complexity Metric", poster and presentation at ICT.OPEN (NWO networking event).
- Michael Steindorfer: "Object Redundancy Profiling in Java", poster and presentation at ICT.OPEN (NWO networking event).
- Tijs van der Storm : "Domain-specific languages", Guest lecture Bachelor Computer Science, Universiteit van Amsterdam
- Tijs van der Storm: "Opportunities and Risks of MDD The case of Derric: a DSL for digital forensics", Presentation at CodeGeneration 2013.
- Tijs van der Storm: "Implementing Domain-specific languages using Rascal", Invited Presentation at Sioux: Source of your technology.
- Tijs van der Storm, Kevin van der Vlist, Jimi van der Woning: "Questionnaires in Rascal", participation Language Workbench Challenge 2013 (LWC'13).
- Tijs van der Storm, Alex Loh, "Questionnaires in Ensō", participation Language Workbench Challenge 2013 (LWC'13).
- Tijs van der Storm: "QL: a language for questionnaires", assignment description LWC'13.
- Tijs van der Storm : "Software Development Automation Research: Collaboration with Industry", presentation at the 1st Dutch conference on Software Development Automation (SDA'13).
- Jurgen Vinju: "Modularity", Guest lecture Bachelor Computer Science, Universiteit van Amsterdam
- Jurgen Vinju: "Software Analysis and Transformation with Rascal", Presentation NBIC BioAssist meeting (BioAssist)
- Jurgen Vinju, Tijs van der Storm, Atze van der Ploeg, Anastasia Izmaylova, Ali Afroozeh: CWI Open Day, demonstration of NAO robot programming to children using dedicated DSL "Marvol".
- Jurgen Vinju, Tijs van der Storm, Atze van der Ploeg: "CWI In Bedrijf" (CWI and Industry), demonstration of Rascal language workbench using the NAO robot DSL "Marvol".
- Vadim Zaytsev: "A Snappy Introduction to Metaprogramming in Rascal", RedDevCon'13.
- Vadim Zaytsev: "Modeling Software Structures with GrammarLab", Tutorial at MoDELS'13.

DREAMPAL Team

9. Dissemination

9.1. Scientific Animation

F. Guyomarch is a member of the ComPAS program committee. Jean-luc Dekeyser is PC Member of DSD, Reconfig, Recosoc and Sympa.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence : F. Guyomarch, Algorithmique et programmation, 144h, L1, IUT-A (Université de Lille 1), France

Licence : F. Guyomarch, Modélisation et théorie des langages, 64h, L2, IUT-A (Université de Lille 1), France

Licence: Philippe Marquet, Introduction to Computer Science, 15h, Secondary Education Teatcher Training, Université Lille 1, France

Licence: Philippe Marquet, System Programming, 60h, L3, Université Lille 1, France

Master: Philippe Marquet, Design of Operating System, 60h, M1, Université Lille 1, France

Master: Philippe Marquet, Web of Things: Embedded System Programming, 20h, M1, Université Lille 1, France

Master: Philippe Marquet, Parallel and Distributed Programming, 24h, M1, Université Lille 1, France

Master: Philippe Marquet, Introduction to Innovation and Research, 15h, M2, Université Lille 1, France

Licence: Jean-Luc Dekeyser, Architecture élémentaire, 85h, L2, Université Lille 1, France

Master: Jean-Luc Dekeyser, Architecture évoluée, 90h, M1, Université Lille 1, France

Licence : Rabie Ben Atitallah, Introduction to Computer Architecture and Operating System, 36h, L2, Université de Valenciennes et du Hainaut-Cambrésis, France

Licence: Rabie Ben Atitallah, Algorithms and Language C Programming, 48h, L2, Université de Valenciennes et du Hainaut-Cambrésis, France

Master: Rabie Ben Atitallah, Tools for Embedded System Design, 32h, M2, Université de Valenciennes et du Hainaut-Cambrésis, France

Master: Rabie Ben Atitallah, Development and Compilation of Embedded Application, 32h, M2, Université de Valenciennes et du Hainaut-Cambrésis, France

Master: Vlad Rusu, Software Specification and Verification, 27 h, Univ. Lille 1, France

Master: Vlad Rusu, Advanced Software Architecture, 42 h, Univ. Lille 1, France.

9.2.2. Committees

Vlad Rusu participated as a reviewer in the PhD committees of Rouwaida Ben-Abdallah (Univ. Rennes) and Pierre-Nicolas Tolitte (Conservatoire National des Arts et Métiers, Paris).

9.3. Popularization

Philippe Marquet is vice-president of the *Société informatique de France*, the French professional society in computer science.

Philippe Marquet is involved in scientific popularization, mostly within the context of a partnership of between the Inria Lille - Nord Europe Research Center, the University Lille 1, and the Académie of Lille. He organizes and participates to the visit of classrooms on the Inria Plateau at EuraTechnologies, promoting interactions between the scientific community and secondary school students and their teachers. This year, 30 "proviseurs", 30 teachers, and about 170 students spend half a day on the Plateau. He has designed the isnlilleacademie.fr web site (http://www.isnlilleacademie.fr), an information site on the *spécialité ISN* (computer and digital science in french high schools) for pupils, students, and their parents'.

Philippe Marquet is a member of the editorial board of 1024, the new bulletin of the *Société informatique de France* that aims at showing informatics, science and technology, in all its dimensions. 1024 targets a wide audience, from high school students to researcher, including anyone interested in computer science.

DOLPHIN Project-Team

9. Dissemination

9.1. Scientific Animation

Organization:

- NIDISC'2013, Nature Inspired Distributed Computing, in IEEE IPDPS, Boston, USA, May 2013.
- GreenDaysLille, Lille, Nov 2013.
- Special issue on New advances in metaheuristics, Journal of Mathematical Modelling and Applications, co-edited by L. Jourdan and E-G. Talbi
- Special issue on Emergent nature inspired algorithms for multi-objective optimization, Computers and Operations Research (COR), co-edited by J. Figueira and E-G. Talbi
- Special issue on Scalable optimization in grid, cloud and intelligent network computing, Concurrency and Computation: Practice and Experience, co-edited by J. Kolodziej, S. U. Khan and E-G. Talbi
- Special issue on Metaheuristics on GPUs, Journal of Parallel and Distributed Computing (JPDC), co-edited by E-G. Talbi and G. Hasle
- International conference EA 2013 Artificial Evolution (Oct 2013 Bordeaux, France)
- Intelligent optimization in Bioinformatics session in LION 7 (Catania, Italy, January 2013) organized by Clarisse Dhaenens and Laetitia Jourdan
- Problem structure vs. algorithm performance in multiobjective combinatorial optimization session at LION 2013, co-organized by Hernan Aguirre, Arnaud Liefooghe, Kiyoshi Tanaka and Sébastien Verel (Catania, Italy, January 2013)
- Special issue on Evolutionary Multiobjective Optimization, European Journal of Operational Research, co-edited by Dimo Brockhoff, Bilel Derbel, Arnaud Liefooghe and Sébastien Verel
- Evolutionary Multiobjective Optimization session at the MCDM 2013 conference, co-organized by Dimo Brockhoff, Bilel Derbel, Arnaud Liefooghe and Sébastien Verel (Malaga, Spain, June 2013)
- Artificial Evolution Summer School (AESS 2013, Quiberon, France, June 2013), co-organized by Dimo Brockhoff, Bilel Derbel, Arnaud Liefooghe and Sébastien Verel (Malaga, Spain, June 2013)
- Special issue on Evolutionary Multiobjective Optimization, Journal of Multi-Criteria Decision Analysis, co-edited by Dimo Brockhoff and Kalyanmoy Deb, published as Volume 20, Issue 5-6, in November 2013
- Lorentz Center workshop "SIMCO Set-Oriented and Indicator-Based Multi-Criteria Optimization" in Leiden, Netherlands in September 2013, co-organized by Dimo Brockhoff together with Michael Emmerich, André Deutz, and Boris Naujoks, about 40 participants, see http://www.lorentzcenter.nl/lc/web/2013/583/info.php3?wsid=583 and http://simco.gforge.inria.fr/
- GECCO 2013 workshop entitled "Blackbox Optimization Benchmarking" in Amsterdam, Netherlands in July 2013, co-organized by Dimo Brockhoff together with Anne Auger, Bernd Bischl, Nikolaus Hansen, Olaf Mersmann, Petr Pošík, and Heike Trautmann, see http://coco.gforge.inria.fr/doku.php?id=bbob-2013
- Special session on uncertainty handling at the 22nd International Conference on Multiple Criteria Decision Making (MCDM'2013) in Malaga, Spain in June 2013, co-organized by Dimo Brockhoff and El-Ghazali Talbi together with Jürgen Branke
- invited track chair for the EMO track at the GECCO'2013 conference in Amsterdam, Netherlands, Dimo Brockhoff together with Frank Neumann, see http://www.sigevo.org/gecco-2013/organizers-tracks.html#emo

Research management:

- Manager (Chargé de mission) of supercomputing for Université Lille 1.
- Scientific leader for Lille of the Grid'5000 nation-wide and EGI european-wide grid infrastructures.
- Scientific leader of the challenge "Large scale combinatorial optimization" of the HEMERA nationwide grid and cloud computing research action (AEN) of Inria.
- Member of the steering committee of the Aladdin-Grid5000 nation-wide technological developement action of Inria.
- Co-leader of the PPF "Supercomputing" at Université Lille 1.
- Chair of the "Parallel Evolutionary Systems" track of GECCO'2013, Amsterdam, Netherlands, July 2013.

Reviewing:

- Computers and Operations Research
- European Journal of Operational Research
- Journal of Multi-Criteria Decision Analysis
- IEEE Transactions on Evolutionary Computation
- Applied soft computing (ASOC)
- Soft Computing (SOCO)
- KAI (Knowledge and Information Systems)
- Journal of Mechanical Engineering Science
- Computer Languages, Systems and Structures
- 4OR A Quarterly Journal of Operations Research
- Journal of Supercomputing
- International Transactions in Operational Research
- Computers and Industrial Engineering
- MEME (Memetic Computing Journal)
- Evolutionary Computation
- Theoretical Computer Science
- Artificial Intelligence Journal
- IEEE Transactions on Systems, Man and Cybernetics Part B
- Journal of Multi-Criteria Decision Analysis

Program committees:

- MICAI 2013, track Evolutionary and Nature-inspired Metaheuristics (November 2013, Mexico City, Mexico)
- ECAL 2013, European Conference on Artificial Life, (September 2013, Taormina, Italy)
- IEEE Congress on Evolutionary Computation (IEEE CEC 2013) (Cancun, Mexico, June 2013)
- International conference MIC Metaheuristics International Conference 2013 (Singapor)
- Genetic and Evolutionary Computation Conference (GECCO 2013), (Amsterdam The Netherlands, 2013)
- 7th International Conference on Evolutionary Multi-criterion Optimization (EMO 2013, Sheffield, UK, 2013)
- 7th Learning and Intelligent Optimization Conference (LION 7, Catania, Italy, January 2013)
- EA 2013 Artificial Evolution, 21-23 October 2013, Bordeaux, France

- 6th Workshop on Artificial Life and Evolutionary Algorithms (ALEA 2013), as a part of EPIA 2013 (Açores, Portugal, 2013)
- Genetic and Evolutionary Computation Conference (GECCO 2013), Evolutionary Combinatorial Optimization and Metaheuristics (ECOM) track (Amsterdam The Netherlands, 2013)
- IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2013, Singapour, 2013)
- 13th European Conference on Evolutionary Computation in Combinatorial Optimisation (EvoCOP 2013, Vienna, Austria, 2013)
- 7th International Conference on Evolutionary Multi-criterion Optimization (EMO 2013, Sheffield, UK, 2013)
- 7th Learning and Intelligent Optimization Conference (LION 7, Catania, Italy, January 2013)
- ICANNGA'2013 Int. Conf. on Adaptive and Natural Computing Algorithms, Lausanne, Switzerland, Apr 2013.
- HAIS'2013 8th Int. Conf. on Hybrid Artificial Intelligence Systems, Salamanca, Spain, Sept 2013.
- ECAL'2013 8th European Conf. on Artificial Life, Taormina, Italy, Sept 2013.
- IC3'2013 Int. Conf. On Contemporary Computing, Noida, India, Aug 2013.
- GPC'2013 Int. Conf. On Grid and Pervasive Computing, Daegu, Korea, May 2013.

Commission:

- President of the recruiting committee for associate professorship in computer science (COS McF 27
 Univ. Lille 1 2013) 3 positions.
- External member of the recruiting committee for associate professorship in computer science (COS McF 27 Univ. Littoral Cote d'Opale 2013), (COS McF 26 Univ Bordeaux 2013).
- External member of the recruiting committee for professorship in computer science (COS PR27-Univ. Tours 2013).
- External reviewer for the PhD student grants at Microsoft Research Cambridge
- External reviewer for the Luxembourg National Research Fund (FNR)
- President of the Technological Development Commission (CDT) of Inria Lille.
- President of the Research Positions Commission (CER Commission des Emplois de Recherche) of Inria Lille.
- External project reviewer, Qatar National Research Fund (QNRF) (2013).

Dessimination:

- Dimo Brockhoff: invited GECCO'2013 tutorial on Evolutionary Multiobjective Optimization
- El-ghazali Talbi: invited CEC'2013 tutorial on Parallel and Distributed Evolutionary Algorithms

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Engineering school : Clarisse Dhaenens, Graphs and Combinatorics, 80 HeqTD,Polytech Lille, University Lille 1, France

Engineering school: Clarisse Dhaenens, Operations Research, 70 HeqTD,Polytech Lille, University Lille 1, France

Engineering school : Clarisse Dhaenens, Algorithmics and programming, 45 HeqTD,Polytech Lille, University Lille 1, France

Master: D. Brockhoff, Advanced Control, 18h, M2, Ecole Centrale Paris, Chatenay-Malabry, France

Licence : L. Jourdan, Initiation à la programmation, 54 heures équivalent TD, niveau L1, université de Lille 1, France

Master : L. Jourdan, Fouille de données, 60 heures en équivalent TD, niveau (M1-Miage) université de Lille 1, France

Master : L. Jourdan, Informatique décisionnelle, 36 heures en équivalent TD, niveau (M1-Informatique) université de Lille 1, France

Master : L. Jourdan, Mise à niveau en Informatique décisionnelle, 24 heures en équivalent TD, niveau (M1-Miage) université de Lille 1, France

Licence: A. Liefooghe, Algorithmic and Data structure, 36h, L2, Université de Lille 1, France

Licence: A. Liefooghe, Algorithmic - Operations Research, 36h, L3, Université de Lille 1, France

Master: A. Liefooghe, Databases, 30h, M1, Université de Lille 1, France

Master: A. Liefooghe, Object-oriented Design and Programming, 52h, M1, Université de Lille 1, France

Master: A. Liefooghe, Combinatorial Optimization, 10h, M2, Université de Lille 1, France

Master of Advanced Scientific Computing: Nouredine Melab, Supercomputing, 33, M2, université Lille 1. France

Master Computer Science: Nouredine Melab, Parallel and Distributed Programming, 20, M1, université Lille 1, France

Master MIAGE: Nouredine Melab, Operations Research, 45, M1, université Lille 1, France

Polytech Lille: Marie-Eléonore Marmion, Database, 67h ETD, 1st year, Université Lille 1, France

Polytech Lille: Marie-Eléonore Marmion, Algorithm and Programming, 45h ETD, 1st year, Université Lille 1, France

Polytech Lille: Marie-Eléonore Marmion, Graph, 10h ETD, 1st year, Université Lille 1, France

Polytech Lille : Marie-Eléonore Marmion, Data Mining, 10h ETD, 3rd year, Université Lille 1, France

Master: Bilel Derbel, Combinatorial Optimization, 35h, M2, University Lille 1, France

Master: Bilel Derbel, Grid Computing, 16h, M2, University Lille 1, France

Master: Bilel Derbel, Parallel and Distributed Programming, 12h, M1, University Lille 1, France

Master: Bilel Derbel, Advanced Object Programming, 92h, M1, University Lille 1, France

Master: Bilel Derbel, Design of Distributed Applications, 60h, M1, University Lille 1, France

Master: Bilel Derbel, Algorithms and Applications, 28h, M1, University Lille 1, France

Engineering school: El-Ghazali Talbi, Advanced optimization, 36h, Polytech'Lille, University Lille 1, France

Engineering school: El-Ghazali Talbi, Data mining, 36h, Polytech'Lille, University Lille 1, France

Engineering school: El-Ghazali Talbi, Operations research, 60h, Polytech'Lille, University Lille 1, France

Engineering school: El-Ghazali Talbi, Graphs, 25h, Polytech' Lille, University Lille 1, France

9.2.2. Supervision

PhD: Julie Hamon, Optimisation combinatoire pour la sélection de variables en régression en grande dimension: Application en génétique animale, Université Lille 1, 26/11/2013, Clarisse Dhaenens, Julien Jacques (MODAL)

PhD: Khedidja SERIDI, Approches multi-objectives pour le biclustering : applications aux microarrays (puce à ADN), Université de Lille 1, soutenance 5/7/2013, Co-direction : El-Ghazali Talbi et Laetitia Jourdan

PhD: Julie Jacques, Classification sur données médicales à l'aide de méthodes d'optimisation et de datamining, appliquée au pré-screening dans les essais cliniques, Université de Lille 1, soutenance 2/12/2013, Co-direction: Clarisse Dhaenens et Laetitia Jourdan

PhD: Yacine KESSACI, Multi-criteria Scheduling on Cloud, Université Lille 1, 11/28/2013, Nouredine Melab and El-Ghazali Talbi

PhD: Imen CHAKROUN, Parallel Heterogeneous Branch and Bound Algorithms for Multi-core and Multi-GPU Environments, Université Lille 1, 06/28/2013, Nouredine Melab

PhD: Mathieu DJAMAI, Peer to Peer Branch and Bound Algorithms for Computational Grids, Université Lille 1, 03/11/2013, Nouredine Melab and Bilel Derbel

PhD in progress: Sophie Jacquin, Combining exact method and metaheuristics for production problems, début: 1/10/2012, Co-direction: El-Ghazali Talbi et Laetitia Jourdan

PhD in progress : Sylvain Dufourny, Optimisation de décisions économiques concurrentielles dans un simulateur de gestion d'entreprise, Novembre 2012, Clarisse Dhaenens

PhD in progress: Thanh-Do TRAN, Benchmarking Continuous Multiobjective Optimization Algorithms, 12/2011, Dimo Brockhoff and El-Ghazali Talbi

PhD in progress: Rudi LEROY, Massively parallel tree-based exact algorithms for hybrid clusters, 11/05/2012, Nouredine Melab

PhD in progress : Francois LEGILLON, Static and Dynamic Resource Brokering on multi-clouds, 09/01/2010, Nouredine Melab and El-Ghazali Talbi

PhD in progress: Trong Tuan VU, Large scale heterogeneous tree-based exact algorithms for grids, 11/05/2012, 09/01/2010, Bilel Derbel and Nouredine Melab

PhD : Mustapha DIABY, Approche de gestion de revenus pour un problème de tarification pour le transport longue distancd, Université de Lille 1, soutenance Nov 2013, El-Ghazali Talbi et Luce Brotcorne

PhD in progress: Nadia Dahmani, Multi-objective packing problems, 12/2009, El-Ghazali Talbi and François Clautiaux

PhD in progress : A. Stathakis, Satellite payload reconfiguration optimization, 12/2010, El-Ghazali Talbi and Pascal Bouvry

PhD in progress: A. Q. Nguyen, Green scheduling on cloud computing systems, 11/2012, El-Ghazali Talbi and Pascal Bouvry

PhD in progress : Oumayma Bahri, Fuzzy multi-objective optimization, 11/2013, El-Ghazali Talbi and Navla Ben-Omar

PhD in progress: Asma Gannouni, Stochastic multi-objective optimization using metaheuristics, 11/2013, El-Ghazali Talbi and Rachid Ellaia

9.2.3. *Juries*

- Clarisse Dhaenens: Caractérisation d'instances difficiles pour des problèmes d'optimisation NPdifficiles de Valentin Weber, Université de Grenoble, Encadrants: Nadia Brauner, Yann Kieffer -July 2013 (Rapporteur et Présidente).
- Clarisse Dhaenens : Extraction de motifs contraints dans des donnés bruitées de K. Mouhoubi, Université de Paris XIII, Encadrants : Lucas Létocart, C. Rouveirol September 2013 (Rapporteur).
- Clarisse Dhaenens: Metaheuristics, Heuristics and Exact Algorithms to Solve Constrained Hybrid Flow Shop: Application to a Three-stage Supply Chain de Walid Besbes, Université de Mons (Belgique), Encadrants: Taicir Loukil, Jacques Teghem September 2013.
- Clarisse Dhaenens : Column generation for Bi-Objective integer Linear programs : Application to Bi-Objective Vehicle Routing Problems de Boasu Sarpong, Université de Toulouse, Encadrants : Christian Artigues, Nicolas Jozefowiez December 2013 (Rapporteur).

- L. Jourdan: Métaheuristiques pour l'optimisation combinatoire sur processeurs graphiques (GPU) de Audrey DELEVACQ de l'Université de Reims, encadrants : Pierre Delisle et Michael Krajecki February 4th 2013 (Rapporteur)
- L. Jourdan Hybrid Evolutionary Metaheuristics for Multiobjective Decision Supportde Ahmed M. KAFAFY de l'université de Lyon, encadrants : Stéphane Bonnevay et Ahmed Bounekkar October 24th 2013 (Rapporteur)
- L. Jourdan: Optimisation multi-objectif de missions de satellites d'observation de la Terre de Panwadee Tangpattanakul, LAAS and INSA Toulouse, encadrant : Pierre Lopez et Nicolas Jozefowiez September, 26th 2013 (Présidente de Jury)
- E-G.Talbi: La métaheuristique CAT pour le design de réseaux logistiques déterministes et stochastiques de Marc-André Carle, Université Laval, Québec, Canada. encadrant: Nicolas Zuffery, Jan 2013 (Rapporteur)
- E-G. Talbi, Perfectionnement de métaheuristiques pour l'optimisation continue de Ilhem Boussaid, Université USTHB (Algérie) et Université Paris Créteil (France), encadrants: M. Ahmed-Nacer, P. Siarry, Juin 2013 (Rapporteur)
- E-G. Talbi: Modélisation dynamique de la densité de population via les réseaux cellulaires et optimisation multobjectif de l'auto-partage de Laurent Moalic Université Franche-Comté (France), encadrents: A. Caminada, S. Lamrous, F. Spies, Dec 2013 (Rapporteur).

9.3. Popularization

- Fête de la science
- Big Data Event (Mar 2013): Conference for industrial Intervention on "Modeling and multiobjective optimization for knowledge discovery"

MODAL Project-Team

9. Dissemination

9.1. Scientific Animation

- Alain Celisse is reviewer for numerous top-level statistical journal: Annals of Statistics, Electronic
 journal of Statistics, Biometrika, JSPI...He also reports on various French funding proposals (ANR,
 PEPII, PEPS,...). Alain Celisse is a member of The French Statistical Association (SFDS) and more
 precisely belongs to the "Mathematical statistics" board.
- C. Biernacki belongs to the program comity of "Extraction et gestion des connaissances" in 2013 and to the program comity of "Journées Françaises de Statistique" in 2013. Since '10, he is an Associate Editor of the journal "Case Studies in Business, Industry and Government Statistics" (CSBIGS) http://www.bentley.edu/centers/csbigs.
 - Since '12, C. Biernacki is the president of the data mining and learning group of the French statistical association (SFdS) http://www.sfds.asso.fr/. Since '11, he is leader of the team "Probability & Statistics" of the Laboratory of mathematics of U. Lille 1 http://math.univ-lille1.fr/. Since '13 (September), he is co-leader of the Laboratory of mathematics "Painlevé" of U. Lille 1 http://math.univ-lille1.fr/.
- Sophie Dabo-Niang animates a research group on « Spatial Statistics and Archeology » with statisticians and archeologist.
- Guillemette Marot is a member of the organizing committee of seminars from Bilille platform. More information about seminars of the year is available on https://wikis.univ-lille1.fr/bilille/animation.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- Christophe Biernacki (head of the M2 Ingénierie Statistique et Numérique http://mathematiques.univ-lille1.fr/Formation/):
 - Master 1st year: Mathematical statistics, 60h, coaching project, 10h, M1, U. Lille 1, France
 - Master 2nd year: Data analysis, 97.5h, Analysis of variance and experimental design,
 22.5h, coaching internship, 20h, M2, U. Lille 1, France
- Alain Celisse (6 month delegation at Inria):
 - Licence 1st and 2nd year: (96h) Computer Science departement in IUT A, Univ. Lille 1
 - Master 2nd year: Statistical theory (30h) to Applied Mathematics students.
- Sophie Dabo-Niang:
 - Master MIASHS (Mathématiques, Informatique appliquées aux SHS),
 - Master of Statistics of university Gaston Berger (Senegal).
- Serge Iovleff (6 month delegation at Inria):
 - Markov chain theory, Algebra, graphs, languages and automate theory (120h).
- Julien Jacques:
 - Licence 3rd year: Statistique Inférentielle, 50h, École Polytechnique Universitaire de Lille,
 U. Lille 1,France
 - Master 1st year: Statistique Exploratoire, 40h, École Polytechnique Universitaire de Lille,
 U. Lille 1,France

- Master 1st year: Modélisation Statistique, 30h, École Polytechnique Universitaire de Lille,
 U. Lille 1,France
- Master 2nd year: Séries Temporelles, 25h, École Polytechnique Universitaire de Lille, U.
 Lille 1, France.
- Mathieu Marbac-Lourdelle:
 - Licence: Probabilités, 30h, École Polytechnique Universitaire de Lille, U. Lille 1, France.
 - Licence: Statistiques, 34h, École Polytechnique Universitaire de Lille, U. Lille 1, France.
- Guillemette Marot:
 - Licence: Biostatistics, 12h,PACES (équivalent L1), U. Lille 2, France
 - Master: Biostatistics, 45h, M1, U. Lille 2, France
 - Formation permanente: Data Analysis with R, 12h, U. Lille 2, France
 - Master: Internships, 15h, M1, U. Lille 2, France.

9.2.2. Supervision

- Alain Celisse is co-supervising the Ph.D. theses of Jérémie Kellner and Quentin Grimonprez respectively with Christophe Biernacki and with Julien Jacques and Guillemette Marot.
- Christophe Biernacki supervises Clément Thery and co-supervises Loic Yengo, Matthieu Marbac-Lourdelle and Jérémie Kellner.
- Sophie Dabo-Niang supervises:
 - Aladji BASSENE, until 2011. Co-tutelle with Aliou Diop (University Gaston Berger, Senegal)
 - Stéphane BOUKA, until 2012 : Co-tutelle with Guy Martial Nkiet, University of FranceVille, Gabon)
 - Emad Aldeen DRWESH, until 2012 : co-direction with Jerôme Foncel (Lille 3)
 - Camille TERNYNCK, until 2011 :co-direction with Anne-Françoise Yao et Fateh Chebana
 - Mohamed YAHAYA, until 2012 : co-direction with Aboubacar Amiri (Lille 3)
 - Mohamed Ould Yehdhih, until 2013 : Co-tutelle with Aliou Diop (University Gaston Berger,
 - Senegal) and Mohamed Attouch (University Sidi Bel Abbes, Algeria).
- Serge Iovleff has supervised a software development engineer (Parmeet Bathia).
- Julien Jacques is supervizing Julie Hamon who passed her Ph.D. in November, 26th, 2013. He also co-advised Quentin Grimonprez (co-supervision with Guillemette Marot and Alain Celisse) and Florence Loingeville (co-supervision with Cristian Preda) from 2013.
- Guillemette Marot co-supervised (with Alain Celisse) a one-year engineer Morgane Pierre-Jean, who worked on change point detection with kernel methods for genomic data. She also supervised Quentin Grimonprez (ADT MPAGenomics until october 2013 then PhD) and Samuel Blanck (ADT MPAGenomics from 2013).

9.2.3. Juries

- Alain Celisse was a jury member (examinator) at the Ph.D. defense of Van Hahn NGUYEN (Paris-Sud 11) and during the CR2 INRA competition.
- Christophe Biernacki participated to 7 PhD juries in 2013 (1 as an opponent, 5 as a reviewer, 1 as an examinator).
- Sophie Dabo-Niang was in the PhD jury of Karima Kimouche (University of Constantine; June 2013), Ibrahim Sidi Zakari (University of Marrakesh, June 2013) Van Ly Tran (University of Orleans, December, 12, 2013) Aubin N'dri Yao (University of Abidjan, July, 2013).
- Guillemette Marot was a jury member for the CR2 Inria 2013 competition.

9.3. Popularization

Alain Celisse has given a talk in "30 minutes de science" that is proposed to all Inria team members to illustrate the type research carried out within the different teams in Lille. This talk was about kernel change-point detection.

NON-A Project-Team

8. Dissemination

8.1. Scientific Animation

- Organization of conferences
 - J.P. Richard, a memeber of NOC of 20th IFAC World Congress, Toulouse, France, 10-14 July 2017
 - D. Efimov, Invited Session at IEEE CDC 2013, "Interval estimation of uncertain systems"
- Participation at International Programming Committees (IPCs) of conferences
 - J.P. Richard, AE at EUCA-IEEE ECC'13, Zürich, Suisse (12th European Control Conference) July 17-19, 2013
 - J.P. Richard, AE at IFAC 2013 Joint conference SSC-TDS-FDIA, Grenoble, France ("Symposium System Structure and Control", "Workshop Time-Delay Systems" and "Workshop Fractional Differentiation and Its Applications"), February 4-6, 2013
 - J.P. Richard, IEEE ICCVE 2013, Las Vegas, Nevada, USA (2nd Int. Conference on Connected Vehicles & Expo), December 2-6, 2013
 - J.P. Richard, IEEE GLOBECOM 2013, Atlanta, Georgia, USA (11th Global Communications Conference), Dec.2013
 - J.P. Richard, IEEE VTC2013, Dresden, Germany (77th IEEE Vehicular Technology Conference), Track 'Mobile Networks, Applications and Services', 3-5 June 2013
 - J.P. Richard, IEEE SaCoNet 2013, Paris, France (4th IEEE Int. Conference on SmArt COmmunications in NEtwork Technologies), 17-19 June 2013
 - W. Perruquetti, IFAC 2013 Joint conference SSC-TDS-FDIA ("Symposium System Structure and Control", "Workshop Time-Delay Systems" and "Workshop Fractional Differentiation and Its Applications"), Grenoble, France, 4-6 February 2013
 - W. Perruquetti, 5th IFAC International Workshop on Periodic Control Systems (PSYCO'2013), Caen, France, 3-5 July 2013
 - W. Perruquetti, National Projects Vice-Chair at ECC 2014, Strasbourg, France, 24-25 June 2014
 - W. Perruquetti and D. Efimov, IFAC World Congress 2014, Cape Town, South Africa
 - A. Polyakov, VSS 2014, Nantes, France

• Plenary talks

- J.P. Richard, Keynote paper GDRi DelSys CNRS, LAAS, Toulouse, November 2013
- J.P. Richard and W. Perruquetti, HYCON2-BALCON joint workshop, FP7, Belgrade, Serbie, July 2013
- D. Efimov, CinvesRob 2013, Cinvestav Guadaljara, Mexico, November 2013
- O. Gibaru, International Conference on New Trends in Splines and Approximation Theory, June 19-21, 2013
- R. Ushirobira, Colloquium S\(\tilde{a}\)o Paulo-Lyon "Algebra, Groups and Logic", Lyon, April 2013

Invited seminars

 J.P. Richard, GREYC CNRS, EnsiCaen, Caen, "Networked Control Systems: to buff, or not to buff", Novembre 2013

- J.P. Richard, GT SàR du GDR MACS, Lille, Juin 2013
- D. Efimov, UNAM, Mexico, November 2013

National scientific animation

- T. Floquet is a member of Conseil National des Universités, 61ème Section
- G. Zheng is a member of Conseil National des Universités, 61ème Section
- R. Ushirobira is a member of Conseil National des Universités, 25ème Section, a member of the bureau of the "Comission Permanente du CNU"
- R. Ushirobira is a member of the "Commission de Développement Technologique" of the research center Inria Lille and a member of the "Comité de centre" of the research center Inria Lille
- J.P. Richard, Scientific Committee of the GdR MACS, CNRS, Group of Research in "Modelling, Analysis and Control of dynamic Systems"
- J.P. Richard, Scientific Committee of the group "Control and communication networks", created Jan. 2010 within the GdR MACS
- R. Ushirobira is a member of the GDR CNRS 3395 "Algebraic and geometric Lie theory"
- W. Perruquetti is a head of ANR Piloting Committee

• International scientific animation

- J.P. Richard is a member of GDRi DelSys CNRS
- J.P. Richard is a member of IFAC Technical Committee "Networked Systems" (International Federation of Automatic Control, TC1.5)
- J.P. Richard is a member of IFAC Technical Committee "Linear Control Systems" (International Federation of Automatic Control, TC2.2)
- D. Efimov is a member of IFAC Technical Committee "Adaptive and Learning Systems" (International Federation of Automatic Control, TC1.2)
- W. Perruquetti is a member of IFAC Technical Committee "Non-linear Control Systems" (International Federation of Automatic Control, TC2.3) and a member of IFAC Technical Committee "Discrete and Hybrid Systems" (International Federation of Automatic Control, TC1.3)
- A. Polyakov is a member of IFAC Technical Committee "Non-linear Control Systems" (International Federation of Automatic Control, TC2.3)
- W. Perruquetti is the Chair of IFAC Technical Committee "Social impact of automation" (International Federation of Automatic Control, TC9.2)
- G. Zheng, T. Floquet and D. Efimov are members of IFAC Technical Committee "Social impact of automation" (International Federation of Automatic Control, TC9.2)

The members of Non-A are reviewers for most of the journal of the control and signal communities: IEEE Transactions on Automatic Control, IEEE Transactions on Systems and Control Technologies, IEEE Transactions on Industrial Electronics, IEEE Transactions on Signal Processing, Automatica, SIAM Journal on Control and Optimization, Journal of Computation and Applied Mathematics, Systems & Control Letters, International Journal of Control, International Journal of Robust and Nonlinear Control, International Journal of Systems Science, Journal Européen des Systèmes Automatisés, IET Control Theory & Applications, Fuzzy Sets and Systems, Mathematics and Computers in Simulation, International Journal of Modeling and Simulation, Journal of the Franklin Institute, ...

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

- Licence: Jean-Pierre Richard; Automatique et Intelligence ambiante (12h); L2; EC-Lille; France
- Licence : Lotfi Belkoura; Automatique (systèmes linéaires monovariables)(75h), Introduction à la Robotique (25h); L3; Lille 1; France
- Licence: Denis Efimov; TP Automatic control (16h), L2; EC Lille; France
- Licence: Gang Zheng; TP Automatic control (16h), L2; EC Lille; France
- Licence: Samer Raichy; Systèmes linéaires, Asservissements, Conversion d'énergie, Echantillonnages et systèmes discrets (192h), L3; ENSEA; France
- Licence: Rosane Ushirobira; TP Automatic control (16h); L2; EC-Lille; France
- Licence: Rosane Ushirobira; TP Numerical Analysis (20h); L1; Polytech Lille; France
- Master: Jean-Pierre Richard; Systèmes dynamiques (30h), Métiers de la recherche (4h), Modélisation des systèmes complexes(12h), Commande et observation (12h), Séminaire episteme (24h); L3; EC-Lille; France
- Master: Jean-Pierre Richard; Systèmes dynamiques non linéaires et à retards (30h); M2; Lille 1 –
 EC-Lille, France
- Master: Lotfi Belkoura; Représentation d'état (55h); M1; Lille 1; France
- Master: Lotfi Belkoura; Projets (10h); M1; Lille 1; France
- Master: Lotfi Belkoura; Introduction aux distributions (10h); M2; Lille 1; France
- Master: Rosane Ushirobira; Probability and Statistics (20h); M2; EC-Lille; France

8.2.2. Supervision

PhD: Emmanuel Bernuau, "Homogeneity theory for analysis and control", EC Lille, 04 October 2013, supervisors are W. Perruquetti and D. Efimov

PhD: Diego Mincarelli, "State estimation for hybrid systems", Lille 1, 19 December 2013, supervisors are L. Belkoura and T. Floquet

PhD: Yingchong Ma, "Path planning and control of non-holonomic mobile robots", EC Lille, 19 December 2013, supervisors are W. Perruquetti and G. Zheng

PhD: Marouene Oueslati, "Contribution à la modélisation dynamique, l'identification et la synthèse de lois de commande adaptées aux axes flexibles d'un robot industriel", Arts et Métiers ParisTech, 18 December 2013, supervisor is O. Gibaru

PhD: Sert H., "Intelligent module decision for autonomous indoor navigation of wheelchair robot", EC Lille, 15 January 2013, supervisors are W. Perruquetti and A.M. Kökösy

PhD in progress: Matteo Guerra, "Supervisory control of collective motion of mobile robots", 2012–..., supervisors are W. Perruquetti, D. Efimov and G. Zheng

PhD in progress: Zilong Shao, "Oscilatory control of robot manipulator", 2013—..., supervisors are W. Perruquetti, D. Efimov and G. Zheng

PhD in progress: Hafiz Ahmed, "Identification and modeling of circadian rhythms for oysters", 2013—..., supervisors are D. Efimov, R. Ushirobira and D. Tran

PhD in progress : Omran Hassan, "Commande et observation des systèmes de contrôle en réseau", 2011–2014, supervisors are J.P. Richard, F. Lamnabhi-Lagarrigue and L. Hetel

PhD in progress: Maalej Sonia, "Algebraic estimation for robust control", 2011-..., supervisors are A. Kruszewski and L. Belkoura

PhD in progress: Essaid Edjekouane, "Cyber-physical systems", 2012-..., supervisors are J.P. Barbot, S. Riachy and Malek Ghanes

8.2.3. Juries

The team members are also involved in numerous examination committees of Theses and Habilitations, recruitment committees, in France and abroad (more than 15).

SequeL Project-Team

9. Dissemination

9.1. Scientific Animation

9.1.1. Awards

- *Crazy Stone* won the 6th edition of the UEC Cup (the most important international computer-Go tournament). It also won the first edition of the Denseisen, by winning a 4-stone handicap game against 9-dan professional player Yoshio Ishida.
- Alexandra Carpentier obtained an AFIA ex-aequo accessit for her PhD, (french machine learning/artificial intelligence second price).

9.1.2. Tutorials

• Tutorial by Rémi Munos at AAAI 2013: From Bandits to Monte Carlo Tree Search: The optimistic principle applied to Optimization and Planning.

9.1.3. Conferences, Workshops and Schools

- *Philippe Preux* and Marc Tommasi were the main organizers of the Conférence sur l'Apprentissage Automatique (CAP'13).
- Rémi Munos was the main organizer of the 8^{ith} Journées Francophones sur la Planification, la Décision et l'Apprentissage (JFPDA'13) along with Marta Soare, Raphael Fonteneau, Michal Valko and Alessandro Lazaric.
- Rémi Munos was co-chair of the Algorithmic Learning Conference, in Singapore, 2013.

9.1.4. Invited Talks

- Daniil Ryabko gave a talk entitled "Time-series information and unsupervised representation learning" at SMILE seminar in Paris
- Michal Valko gave an talk "Sequential Face Recognition with Minimal Feedback" which was
 opening talk of the series named 30 minutes of Science, a new format at Inria Lille to support
 intra-center collaboration.
- Rémi Munos gave a course (6 hours) at the Summer School Netadis in Hillerod, Denmark in September 2013.
- Rémi Munos was invited to give a talk at CMU in November 2013.
- Alessandro Lazaric was invited to give a talk at CMU in March 2013.
- Pierre Chainais gave a talk "Learning a common dictionary over a sensor network" at GDR Phénix
 ISIS workshop about "Analysis and inference for networks" in Paris in november 2013.
- Pierre Chainais gave a tutorial talk on "Multifractal analysis of images and applications" at the "Groupe Image of the company TOTAL in Paris La Défense on sept. 11th, 2013.
- Jérémie Mary gave a invited talk "Recommendation system from a bandit perspective" at GDR "Estimation et traitement statistique en grande dimension" on May 16th, 2013 Télécom Paristech.
- Jérémie Mary gave an invited talk "Bandit point of view on recommenders" at Large-scale Online Learning and Decision Making Workshop Cumberland Lodge, Windsor, UK in September, 2013.
- Jeremie Mary gave an invited talk on recommender systems at "Journées rencontres AFIA/IHM" in may 2013.

9.1.5. Review Activities

• Participation to the program committee of international conferences

- International Conference on Pattern Recognition Applications and Methods (ICPRAM 2013)
- Algorithmic Learning Theory (ALT 2013)
- AAAI Conference on Artificial Intelligence (AAAI 2013)
- European Workshop on Reinforcement Learning (EWRL 2013)
- Annual Conference on Neural Information Processing Systems (NIPS 2013)
- International Conference on Artificial Intelligence and Statistics (AISTATS 2013)
- European Conference on Machine Learning (ECML 2013)
- International Conference on Machine Learning (ICML 2013 and 2014)
- International Conference on Uncertainty in Artificial Intelligence (UAI 2013)
- French Conference on Planning, Decision-making, and Learning in Control Systems (JFPDA 2013)
- IEEE FUSION 2013
- IEEE Approximate Dynamic Programming and Reinforcement Learning (ADPRL 2013)
- ICML workshop "Prediction with Sequential Models"

• *International journal and conference reviewing activities* (in addition to the conferences in which we belong to the PC)

- IEEE Transactions on Image Processing
- Journal of Statistical Physics
- Digital Signal Processing
- IEEE Transactions on Information Theory
- IEEE Statistical Signal Processing SSP'2013
- European Signal Processing Conference EUSIPCO 2013
- 10th International Conference on Sampling Theory and Applications (SampTA 2013)
- IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2013 & 2014)
- Annual Conference on Neural Information Processing Systems (NIPS 2013)
- International Conference on Machine Learning (ICML 2013)
- European Conference on Machine Learning (ECML 2013)
- Uncertainty in Artificial Intelligence (UAI 2013)
- Machine Learning Journal (MLJ)
- Journal of Machine Learning Research (JMLR)
- Journal of Artificial Intelligence Research (JAIR)
- IEEE Transactions on Automatic Control (TAC)
- IEEE Transactions of Signal Processing
- Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS)
- Mathematics of Operations Research (MOR)

9.1.6. Evaluation activities, expertise

- *M. Ghavamzadeh* is in the Editorial Board Member of Machine Learning Journal (MLJ, 2011-present).
- *M. Ghavamzadeh* is in the Steering Committee Member of the European Workshop on Reinforcement Learning (EWRL, 2011-present).

- P. Preux, R. Gaudel and J. Mary are experts for Crédit Impôt Recherche (CIR).
- E. Duflos is a project proposal reviewer for ANR.
- R. Munos is a Member of the Belgium Commission Evaluation F.R.S-FNRS, 2013.

9.1.7. Other Scientific Activities

- R. Munos was Vice Président du Comité des Projets at Inria Lille-Nord Europe, until July 2013.
- D. Ryabko is a member of COST-GTRI committee at Inria.
- D. Ryabko is a general advisor at Inria Lille.
- E. Duflos is Director of Research of Ecole Centrale de Lille since September 2011.
- E. Duflos is the Head of the Signal and Image Team of LAGIS (UMR CNRS 8219).
- R. Gaudel is board member of LIFL.
- *R. Gaudel* manages the proml mailing list. This mailing list gathers French-speaking researchers from Machine Learning community.
- *P. Chainais* is a member of the administration council of GRETSI, the French association of researchers in signal and image processing.
- *P. Chainais* is co-responsible for the action "Machine Learning" of the GDR ISIS which gathers french researchers in signal and image processing at the national level.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Ecole Centrale de Lille: P. Chainais, , "Machine Learning", 36 hours, 3rd year.

Ecole Centrale de Lille: P. Chainais, "Wavelets and Applications", 24 hours, 2nd year.

Ecole Centrale de Lille: P. Chainais, "Introduction to Matlab", 16 hours, 3rd year.

Ecole Centrale de Lille: P. Chainais, "Signal processing", 22 hours, 1st year.

Ecole Centrale de Lille: P. Chainais, "Data Compression", 16 hours, 2nd year.

Ecole Centrale de Lille: Ph. Preux, "Data Data Data", 2 hours, 3rd year.

P. Chainais is Responsible for a new 3rd year program called Decision making & Data analysis.

Master: O. Pietquin, "Decision under uncertainty", 46 hours, M2, Master in Computer Science, Université de Lille 1.

Master: A. Lazaric, "Introduction to Reinforcement Learning", 30h eq. TD, M2, Master "Mathematiques, Vision, Apprentissage", ENS Cachan.

Master: R. Gaudel, "Data Mining", 30h eq. TD, M2, Université Lille 3.

Master: R. Gaudel, "Web Mining", 32h eq. TD, M2, Université Lille 3.

Master: R. Gaudel, "Algorithmic", 19h eq. TD, M2, Université Lille 3.

Master: *Ph. Preux*, "Mathematics, Computer Science, and Modeling", M1 of psychology, Université of Lille 3.

Master: Ph. Preux, "Algorithms, and programming in Python", M1 MIASHS, Université of Lille 3.

Licence: Ph. Preux, "Algorithms, and programming in Python", L3 MIASHS, Université of Lille 3.

Licence: R. Gaudel, "Programing", 2 × 16h eq. TD, L1, Université Lille 3.

Licence: R. Gaudel, "Logic", 31.5h eq. TD, L3, Université Lille 3.

Licence: R. Gaudel, "Information and Communication Technologies", $2 \times 16h$ eq. TD, L1, Université Lille 3.

Licence: R. Gaudel, "Artificial Intelligence", 31.5h eq. TD, L2, Université Lille 3.

Licence: R. Gaudel,, "C2i", 25h eq. TD, L1-3, Université Lille 3.

Licence: R. Mary, "C2i", 25h eq. TD, L1-3, Université Lille 3.

Master: *J. Mary*, "Programmation et analyse de donnée en R", 24h eq TD, M1, Université de Lille 3, France.

Master: J. Mary, "Programmation web avancée", 24h eq TD,M2, Université de Lille 3, France.

Master: *J. Mary*, "Programmation objet et Design Pattern", 48h eq TD,M2, Université de Lille 3, France.

Master: J. Mary, "Algorithmique", 12h eq TD,M1, Université de Lille 3, France.

Master (3rd year of Engineer School): *J. Mary*, "Machine Learning avec R", 16 hours, M2, Option "Data Analysis and Decision", Ecole Centrale de Lille, France.

Master (3rd year of Engineer School): *E. Duflos*, "Advanced Estimation", 20 hours, M2, Option "Data Analysis and Decision", Ecole Centrale de Lille, France.

Master (3rd year of Engineer School): *E. Duflos*, "Multi-Objects Filreting", 16 hours, M2, Option "Data Analysis and Decision", Ecole Centrale de Lille, France.

9.2.2. Supervision

PhD: *Azadeh Khaleghi*, "Sur Quelques Problèmes non supervisés impliquant des séries temporelles hautement dépendantes", Nov. 2013, Université de Lille 1, advisor: D. Ryabko.

PhD in progress: *Boris Baldassari*, *Apprentissage automatique et développement logiciel*, since May 2011, advisor: Ph. Preux.

PhD in progress: *Gabriel Dulac-Arnold, A General Sequential Model for Constrained Classification*, since Oct. 2011, advisor: Ph. Preux, L. Denoyer, P. Gallinari.

PhD in progress: *Victor Gabillon*, "Active Learning in Classification-based Policy Iteration", since Sep. 2009, advisor: Ph. Preux, M. Ghavamzadeh.

PhD in progress: *Frédéric Guillou*, "Sequential Recommender System", since Oct. 2013, advisor: Ph. Preux, J. Mary, R. Gaudel.

PhD in progress: *vicenzo Musco*, "Topology and evolution of software graphs", since Oct. 2013, advisor: P. Preux, M. Monperrus

PhD in progress: *Olivier Nicol*, "Data-driven evaluation of Contextual Bandit algorithms and applications to Dynamic Recommendation", since Nov. 2010, advisor: Ph. Preux, J. Mary.

PhD in progress: Adrien Hoarau, "Multi-arm Bandit Theory", since Oct. 2012, advisor: R. Munos.

PhD in progress: *Tomáš Kocák*, "Sequential Learning with Similarities", since Oct. 2013, advisor: R. Munos, M. Valko

PhD in progress: *Emilie Kaufmann*, "Bayesian Bandits", since Oct. 2011, advisor: R. Munos, O. Cappé, A. Garivier.

PhD in progress: *Amir Sani*, "Learning under uncertainty", Oct. 2011, since advisor: R. Munos, A. Lazaric.

PhD in progress: *Marta Soare*, "Pure Exploration in Multi-arm Bandit", since Oct. 2012, advisor: R. Munos, A. Lazaric.

PhD in progress: *Hong Phuong Dang*, *Bayesian non parametric methods for dictionary learning and inverse problems*, since Oct. 2013, advisor: P. Chainais.

PhD in progress: Linh Van Nguyen, High resolution reconstruction from low resolution measurements of velocity fields in turbulent flows, since Oct. 2013, advisor: P. Chainais & J.p. Laval (Laboratoire de Mécanique de Lille).

9.2.3. *Juries*

 member of the recruitement committee for an assistant professor position at Université de Lille 3: R. Gaudel, Ph. Preux

- member of the recruitement committee for an assistant professor position at Université de Lille 1: P. Chainais
- member of the recruitement committee for a professor position at Université de Paris 6: Ph. Preux
- Member of the jury DR2 Inria 2013: R. Munos
- Member of the jury CR2 Rocquencourt Inria 2013: R. Munos

9.3. Popularization

- "Small or big (data), make it sequentially!", J. Mary, Ph. Preux, invited talk at Euratechnologies, March 2013.
- Inria publishes an article about Face Recognition, Michal Valko, http://www.inria.fr/centre/lille/actualites/intel-collabore-avec-inria, March 2013
- Jérémie Mary highlighted on TV and on Inria website: you are how you browse: http://www.inria.fr/en/centre/lille/news/you-are-how-you-browse, Dec. 2013

SIMPAF Project-Team

9. Dissemination

9.1. Scientific Animation

 A. Gloria organized of a mini-symposium at the SIAM Conference on Mathematical Aspects of Materials Science (Philadelphia, June 2013)

9.2. Teaching - Supervision - Juries

9.2.1. Supervision

PhD: Émilie Soret, Accélération stochastique et thermalisation, 2011-2014, under the supervision of S. de Bièvre and T. Simon (Université Lille 1)

PhD: Pierre-Louis Colin, Theoretical and numerical study of some mathematical models of corrosion, Université Lille 1, 2012/09/01-2015/09/01, under the supervision of C. Chainais-Hillairet and I. Lacroix-Violet

9.2.2. Juries

• A. Gloria, referee for the PhD thesis of F. Ouaki (Ecole polytechnique), December 2013

9.3. Popularization

C. Calgaro is in charge of the communication of "Laboratoire Paul Painlevé" and she is in charge of the relation between the University of Lille and high schools. Accordingly, she organizes various events like « Les Mathématiques itinérantes » and « Stage de seconde à contenu scientifique ». With the help of the Communication Department of Inria, C. Calgaro, E. Creusé and T. Goudon produced a documentary fiction (in French) for a general audience on how research in applied mathematics is being done. The title is "Avis de recherche" (see http://www.inria.fr/avisderecherche).

BONSAI Project-Team

8. Dissemination

8.1. Scientific Animation

- The team actively participates in the national GDR *Bioinformatique moléculaire*. H. Touzet has been a member of the executive committee since 2007. In this context, she coorganized a two-day workshop, called Seqbio, in Montpellier in November 2013
- We organize a regular pluridisciplinary seminar on bioinformatics, whose audience is composed of researchers in biology and bioinformatics. In the last twelve months, we proposed three events: *Metagenomics* (110 participants), *Phylogenomics* (52 participants) and *Structural bioinformatics* (30 participants)
- We organized in Lille, with our collaborator Tilmann Weber from Universität Tüebingen, an
 international workshop on "Bioinformatics tools for NRPS discovery" in July. The schedule included
 introducing lectures by invited speakers which are key scientists in the field and practical sessions.
 It gathered 30 scientists from all the continents.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Our research work finds also its expression in a strong commitment in pedagogical activities at the University Lille 1. For several years, members of the project have been playing a leading role in the development and the promotion of bioinformatics (more than 400 teaching hours per year). We are involved in several graduate diplomas (research master degree) in computer science and biology (*master biologie-santé*, *master génomique et protéomique*, *master biologie-biotechnologie*) in an Engineering School (Polytech'Lille), as well as in permanent education (for researchers, engineers and technicians).

- M. Pupin, M. Salson, *Introduction to programming (OCaml)*, 96h, L1 (licence "Computer science", univ. Lille 1)
- M. Salson, Coding and information theory, 36h, L2 (licence "Computer science", univ. Lille 1)
- J.-S. Varré *Programming with Caml*, 55h, L2 (licence "Sciences for Engineers", univ. Lille 1)
- J.-S. Varré Algorithms and Data structures, 50h, L2 (licence "Computer science", univ. Lille 1)
- L. Noé, Networks, 36h, L3 (licence "Computer science", univ. Lille 1)
- L. Noé, System, 36h, L3 (licence "Computer science", univ. Lille 1)
- M. Pupin, Databases, 36h, L3 (licence "Computer science", univ. Lille 1)
- M. Pupin, Professional project, 18h, L3 (licence "Computer science", univ. Lille 1)
- M. Salson, C programming, 42h, L3 (licence "Computer science", univ. Lille 1)
- S. Janot, *Introduction to programming*, 50h, first year of engineering school (L3) (Polytech'Lille, univ. Lille1)
- S. Janot, *Introduction to databases*, 30h, first year of engineering school (L3) (Polytech'Lille, univ. Lille1)
- L. Noé, Bioinformatics, 54h, M1 (master "Génomique Protéomique", univ. Lille 1)
- L. Noé, *Individual project*, organiser, M1 (master "Computer science", univ. Lille 1)
- M. Pupin, *Introduction to programming (JAVA)*, 30h, M1 (master "Mathématiques et finance", univ. Lille 1)

- M. Salson, J.-S. Varré, *Bioinformatics*, 100h, M1 (master "Biology and Biotechnologies", univ. Lille 1)
- S. Blanquart, *Algorithms and applications in bioinformatics*, 24h, M1 (master "Computer Science", univ. Lille 1)
- S. Janot, *Databases*, 12h, second year of engineering school (M1) (Polytech'Lille, univ. Lille1)
- S. Janot, *Introduction to artificial intelligence*, 25h, second year of engineering school (M1) (Polytech'Lille, univ. Lille1)
- M. Pupin, J.-S. Varré *Computational biology*, 30h, M2 (master "Modèles complexes, algorithmes et données", univ. Lille 1)
- M. Pupin, Practical bioinformatics, 35h, M2 (master "Génomique Protéomique", univ. Lille 1)
- S. Blanquart, Methods in phylogenetics, 4h, M2 (master "Ecology Environment", univ. Lille 1)
- J.-S. Varré, ISN Computer science for secondary school, 30h, second-level teachers.

8.2.2. Supervision

- HDR: *Maude Pupin*, Modèles bio-informatiques pour les peptides non-ribosomiques et leurs synthétases. Defense in December 2013 [2].
- PhD: Evguenia Kopylova, New algorithmic and bioinformatic approaches for the analysis of data from next-generation sequencing, Université Lille 1, co-directed by H. Touzet and L. Noé. Thesis defended in December 2013 [1].
- PhD in progress: *Christophe Vroland*, microRNA repertoire and target evolution: developing efficient indexing techniques and comparison between close plant species, Université Lille 1, co-directed by H. Touzet, M. Salson from Bonsai and V. Castric ("Genetics and evolution in plants" laboratory).
- PhD in progress: *Pierre Péricard*, high-throughput sequencing: taxonomic assignation of metaomic sample reads, Université Lille 1, co-directed by H. Touzet and S. Blanquart.
- PhD in progress: *Yoann Dufresne*, Models and algorithms to analyse and predict non-ribosomal peptides, Université Lille 1, co-directed by M. Pupin and L. Noé.

8.2.3. Juries

- Member of the thesis committee of Natalia Golenetskaya (Université Bordeaux 1, J.-S. Varré)
- Member of the habilitation committee of F. Jossinet (Université de Strasbourg, H. Touzet) and C. Lhoussaine (Université Lille 1, H. Touzet)

8.2.4. Administrative activities

- National representative (*chargée de mission*) for the Institute for Computer Sciences (INS2I) in CNRS ⁹. She is more specifically in charge of relationships between the Institute and life sciences (H. Touzet)
- Member of the Inria evalution committee (M. Giraud)
- Member of the Inria local committee for scientific grants (H. Touzet)
- Member of the Gilles Kahn PhD award committee (H. Touzet)
- Member of ITMO Genetics, Genomics and Bioinformatics of AVIESAN (H. Touzet)
- Member of CSS MBIA (mathematics, bioinformatics and artificial intelligence) at INRA (H. Touzet)
- Member of the executive council of the IFB (Institut Français de Bioinformatique)
- Head of PPF bioinformatics University Lille 1 (H. Touzet)
- Head of Bilille, Lille bioinformatics platform (M. Pupin)

⁹CNRS: National Center for Scientific Research

- Head of IFB-NE (pôle Nord-Est de l'Institut Français de Bioinformatique), a cluster of 4 bioinformatics platforms (M. Pupin)
- Member of UFR IEEA council (M. Pupin)
- Head of the GIS department (Statistics and Computer Sciences) of Polytech'Lille (S. Janot)
- Member of the LIFL Laboratory council (L. Noé, H. Touzet)
- We made two public science presentations (leukemia and high-throughput sequecing, M. Duez, M. Giraud, M. Salson, and transcript comparisons, A. Ouangraoua)
- This year, we did not have a significant activity in high schools due to schedule constraints during the "week of science". We plan to relaunch this activity in 2014.

SHACRA Project-Team

9. Dissemination

9.1. Scientific Animation

9.1.1. VRIPHYS 2013

VRIPHYS 2013 took place in Lille at the end of November: Christian Duriez and Jeremie Dequidt organized the conference with help from Nazim Haouchine and Hugo Talbot. The conference was preceded by a workshop for the users of the SOFA framework. This event was a real success: 60 persons attended the conference (which is about 15 persons more than the previous years).

9.1.2. IPCAI 2013

Stéphane Cotin, Co-Organizer and PC Co-Chair, 2013, International Conference on Information Processing in Computer-Assisted Interventions (IPCAI, http://www.ipcai.org). on June 26, 2013 in Heidelberg, Germany.

9.1.3. Reviewing Activities

- Guillaume Kazmitcheff has been reviewer for the European Archives of Oto-Rhino-Laryngology journal.
- Jeremie Dequidt has been reviewer for the following conferences and journals:
 - Conference IEEE/RSJ IROS 2013
 - Conference IEEE WHC 2013
 - Conference MICCAI 2013
 - the journal Computer Methods and Programs in Biomedicine

and member of the following program committees:

- Conference VRIPHYS 2013
- Conference AFIG 2013
- Christian Duriez has been reviewer for the following conferences and journals:
 - Conference IEEE/RSJ IROS 2013
 - Conference iNaCoMM 2013
 - Conference IEEE VR 2013
 - Conference MICCAI 2013
 - the journal IEEE Transaction on Haptics
 - the journal IEEE Transactions on Visualization and Computer Graphics
 - the journal SCS Simulation
 - the journal the Visual Computer
 - the journal Computer Vision and Visual Understanding
 - ANR projects (Programme CONTINT)

and member of the following program committees:

- Conference VRIPHYS 2013
- Conference IEEE WHC 2013
- Stephane Cotin has been reviewer for the following conferences and journals:
 - Surgical Innovation (SRI)
 - Advanced Modeling and Simulation in Engineering Sciences

and member of the following program committees:

- MICCAI 2013
- IPCAI 2013

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence: Jeremie Dequidt, Computer Architecture, 25h, GIS3, Polytech Lille, France

Licence: Jeremie Dequidt, Advanced Programming, 25h, IMA3, Polytech Lille, France

Licence: Christian Duriez, Introduction to Finite Element Method, 16h, L3, ICAM, France

Licence: Julien Bosman, Programming, 60h, L1, Univ. Lille 1, France

Licence: Julien Bosman, Oriented Object Programming, 32h, L3, Univ. Lille 1, France

Master : Christian Duriez, Introduction to Finite Element Method, 16h, M1 Génie Ferroviaire, ICAM, France

Master: Christian Duriez, Advanced 3D models, 14h, M2 IVI, Univ. Lille 1, France

Master : Christian Duriez, Medical simulation and Haptic Rendering, 3h, M2, École Centrale de Lille, France

Master: Julien Bosman, GPU Computing introduction, 3h, M2 IVI, Univ. Lille 1, France

Master: Jeremie Dequidt, Advanced 3D models, 2h, M2 IVI, Univ. Lille 1, France

Master: Stephane Cotin, Course on advanced biomechanics, 10h, M2, Telecom Physique Strasbourg, France

Master: Stephane Cotin, Course on real-time soft tissue simulation, 20h, M2, Telecom Physique Strasbourg, France

9.2.2. Supervision

PhD in progress: Hugo Talbot, Interactive Patient-Specific Simulation of Cardiac Electrophysiology, 1st October 2010, Stéphane Cotin and Hervé Delingette

PhD in progress : Julien Bosman, Simulations à base de particules et interactions multi-physiques en temps-réel, 1st October 2011, Stéphane Cotin and Christian Duriez

PhD in progress: Guillaume Kazmitcheff, Dynamical modeling of the middle ear and interactions between organs and medical tools to develop a simulator applied to the otological surgery, 1st March 2011, Christian Duriez

PhD in progress: Ahmed Yureidini, Modélisation d'organes par fonctions implicites, 2009, Stéphane Cotin and Erwan Kerrien

PhD in progress : Vincent Majorczyk, Simulation de Fluide GPU, 2010, Stéphane Cotin

PhD in progress : Alexandre Bilger, Biomecanical simulation for Deep Brain Stimulation, 2011, Stéphane Cotin and Christian Duriez

PhD in progress : Zhifan Jiang, Recalage d'images déformables pour la bimécanicanique, 2011, Stéphane Cotin, Jérémie Dequidt, Mathias Brieu

PhD in progress : Mouhamadou Diallo, Modélisation biomécanique du prolapsus génital, 2011, Mathias Brieu, Pauline Lecomte, Christian Duriez

PhD in progress : Nazim Haouchine, Augmented Reality Tools for Minimally Invasive Hepatic Surgery, 2012, Stéphane Cotin, Marie-Odile Berger, Jérémie Dequidt

PhD in progress : François Dervaux, Image driven simulation for interventional radiology procedures, 2012, Stéphane Cotin, Jérémie Dequidt, Erwan Kerrien

PhD in progress: Rosalie Plantefève, 2013, Stephane Cotin

9.2.3. Juries

Christian Duriez was in the examination committee of Coralie Escande, PhD, 12/2013.

Stephane Cotin was in the examination committee of Sagar Umale (Strasbourg University, December 19th, 2012) and in the examination committee of Noura Faraj (Telecom ParisTech, June 3rd, 2013)

9.3. Popularization

9.3.1. Fête de la Science

Christian Duriez has been involved as a *Wandering Researcher* in the Fête de la science (french event that promotes science).

9.3.2. Exhibitions

Christian Duriez and Mario Sanz Lopez have been involved in the design and development of scientific and technological demonstrators for the *Plateau* (e.g. Showroom) Inria at Euratechnologies and for *The Labo* at Inria test laboratory.

9.3.3. Recontre Inria-Industrie 2013

This was a public event taking place in Paris the 11th of June 2013. The new training system dedicated to electrocardiology and the recent deformable robot was presented.

9.3.4. IHU Scientific Days

At the occasion of the IHU Scientific days, we visited the IHU Strasbourg and several talks were done by members of the team: Alexandre Bilger, Stéphane Cotin, Jeremie Dequidt, Nazim Haouchine, Igor Peterlik, and Hugo Talbot.

9.3.5. Intergovernmental seminar

The intergovernmental seminar on digital sciences was held in february at the University of Cergy-Pontoise. Within this context, the team has exhibited a demonstration of a cataract surgery simulator which is dedicated to train surgeons to a new cost-effective cataract surgery procedure MSICS (*manual small incision cataract surgery*). This simulator was developed at Inria and has been transferred to the start-up InSimo.

ADAM Project-Team

9. Dissemination

9.1. Scientific Animation

Laurence Duchien served in the following scientific animations actions:

- Chair of the 5ème Journées du GDR CNRS GPL, Nancy, April 2013,
- Member of the Editorial Board of Lavoisier TSI,
- Member of the Editorial Board of Special Issue "Advanced Architectures for the Future Generation of Software-Intensive Systems" in the Elsevier journal Future Generation Computer Systems,
- Member of the following PC committees:
 - 8th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS), San Francisco, USA, San Francisco, May 2013,
 - 7th European Conference on Software Architecture (ECSA), Montpellier, France, July 2013,
 - 17th European Conference on Software Maintenance and Reengineering (CSMR), Genova, Italy, March 2013,
 - 6th Day Lignes de Produits, Paris, November 2013,
 - Joint Workshop of MAPLE 2013 5th International Workshop on Model-driven Approaches in Software Product Line Engineering and SCALE 2013 4th Workshop on Scalable Modeling Techniques for Software Product Lines at the 17th Software Product Lines Conference, Tokyo, Japan, August 2013,
 - International Workshop on Software Engineering for Systems-of-Systems (SESoS) at the
 7th European Conference on Software Architecture (ECSA), Montpellier, France, 2013,
 - 29th IEEE International Conference on Software Maintenance (ICSM), Eindhoven, the Netherlands, September 2013.

Philippe Merle served in the following scientific animation actions:

- Member of the steering committee of the Conférence en IngénieriE du Logiciel (CIEL),
- Member of the following PC committees:
 - 2nd Conférence en IngénieriE du Logiciel (CIEL), April 2013,
 - 12th International Workshop on Adaptive and Reflective Middleware (ARM), December 2013,
- Member of the Evaluation Committee for the special issue on Ingénierie du Logiciel of the TSI Journal,
- Reviewer for IEEE Computer Magazine, and both ECSA and DAIS conferences.

Romain Rouvoy served in the following scientific animations actions:

- Member of the steering committee of the IFIP International Conference on Distributed Applications and Interoperable Systems,
- Member of the following PC committees:
 - 28th International ACM Symposium on Applied Computing (SAC) 7th Track on Dependable and Adaptive Distributed Systems (DADS), March 2013,
 - 28th International ACM Symposium on Applied Computing (SAC) 1st Track on Software Engineering Aspects of Green Computing (SEGC), March 2013,
 - 1st International Workshop on Green in Software Engineering, Green by Software Engineering (GIBSE), March 2013
 - 10th International USENIX Conference on Autonomic Computing (ICAC) 2nd Track on Self-Aware Internet of Things (Self-IOT), June 2013,
 - 10th International Conference on Services Computing (SCC) Industry track, June 2013,
 - 15th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), September 2013,
 - 2nd Nordic Symposium on Cloud Computing & Internet Technologies (NordiCloud), September 2013,
 - 8th International Workshop on Middleware for Next Generation Internet Computing Workshop (MW4NG), December 2013,
 - 5th International IEEE Conference on Cloud Computing Technology and Science (Cloud-Com), December 2013,
 - 12th International Workshop on Adaptive and Reflective Middleware (ARM), December 2013,
 - 3rd International Workshop on Adaptive Services for the Future Internet (WAS4FI), September 2013,
- Reviewer for the following journals: Springer Journal of Internet Services and Applications, Journal of Ambient Intelligence and Smart Environments, IEEE Transactions on Computers.

Lionel Seinturier served in the following scientific animations actions:

- Guest co-guest editor of a special issue of the Springer Journal of Internet Services and Applications on Greening Distributed Systems,
- Member of the editorial board of the ISTE-Wiley series of books on Computer Science and Information Technology and editor for the Software Engineer domain of this series,
- co-PC Chair of the special session on Self-Adaptive Networked Embedded Systems (SANES) at the 3rd International Conference on Pervasive Embedded Computing and Communication Systems, Barcelona, February 2013,
- Member of the following PC committees:
 - Workshop on Patterns Promotion & Anti-patterns Prevention (PPAP) at the 17th European Conference on Software Maintenance and Reengineering, Genova, March 2013,
 - 7ème Conférence francophone sur les architectures logicielles (CAL), Toulouse, May 2013,
 - 13th IFIP International Conference on Distributed Applications and Interoperable Systems (DAIS), Florence, June 2013,
 - International Workshop of Security and Dependability for Resource Constrained Embedded Systems (S& D4RCES) at the 13th International Conference on Software Reuse, Pisa, June 2013,

- 16th ACM SIGSOFT International Symposium on Component-Based Software Engineering (CBSE), Vancouver, June 2013,
- 39th Euromicro Conference on Software Engineering and Advanced Applications (SEAA), MOCS Track, Santander, Spain, September 2013,
- 6th IEEE International Conference on Service-Oriented Computing and Applications (SOCA), Hawaii, December 2013.
- Reviewer for the following journals: Elsevier Science of Computer Programming, Elsevier Information and Software Technology, Elsevier Journal of System and Software, Lavoisier TSI.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Permanent members teach the following courses.

Laurence Duchien heads the research program in Master of Computer Science at University Lille 1. She heads the Carrières et Emplois service and is referent for the professional insertion in the PhD program in Computer Science at PRES University Lille Nord de France. She is also Director of Doctoral Studies for Computer Science in Doctoral School Engineering Science (SPI) - PRES Lille Nord de France. She teaches the following courses:

Software Project Management, 50h, Level M2, Master MIAGE, University Lille 1,

Design of distributed applications, 42h, Level M1, Master of Computer Science, University Lille 1,

Software Product Lines, 8h, Level M2, Master of Computer Science, University Lille 1,

Research and Innovation Initiation, 22h, Level M2, Master of Computer Science, University Lille 1,

Tutoring Internship, 16h, Level M2, Master of Computer Science, University Lille 1.

Martin Monperrus teaches at the University Lille undergraduate and graduate courses. In particular:

Introduction to programming, 48h, Level L1, Licence of Computer Science, UFR IEEA, University Lille 1

Object-oriented design, 39h, Level L3, Licence of Computer Science, UFR IEEA,

Automated software engineering, 40h, Level M2, Master of Computer Science speciality IAGL, UFR IEEA, University Lille 1.

Romain Rouvoy heads the IAGL specialty of the Master of Computer Science at the University Lille 1. He supervises the Agil-IT Junior Enterprise and gives the following courses at the University Lille 1:

Initiation à la Programmation, 48h, Level L1, Licence of Computer Science, UFR IEEA, University Lille 1,

Conception d'Applications Réparties, 42h, Level M1, Master of Computer Science, UFR IEEA, University Lille 1,

Qualité du Logiciel, 30h, Level M2, Master of Computer Science speciality MIAGE, UFR IEEA, University Lille 1,

Infrastructures et Frameworks Internet, 8h, Level M2, Master of Computer Science speciality IAGL, UFR IEEA, University Lille 1,

Innovation & Initiation à la Recherche, 14h, Level M2, Master of Computer Science speciality IAGL, UFR IEEA, University Lille 1,

Intergiciels Orienté Services, 50h, Level M2, Master of Computer Science speciality IPI-NT, UFR IEEA, University Lille 1,

Suivi de projets, 60h, Level M2, Master of Computer Science, UFR IEEA, University Lille 1,

Suivi d'alternants, 60h, Level M2, Master of Computer Science, UFR IEEA, University Lille 1.

Lionel Seinturier has headed the E-Services specialty of the Master of Computer Science at the University Lille 1 until August 2013. He gives the following graduate courses at the University Lille 1:

Conception d'Applications Réparties, 18h, M1, University Lille 1,

Infrastructures et Frameworks Internet, 6h, M2, University Lille 1.

9.2.2. Supervision

- PhD: Rémi Druilhe, Power Efficiency of Services in Dynamic and Heterogeneous Dynamic Systems, 5 December 2013, Laurence Duchien & Lionel Seinturier.
- PhD: Russel Nzekwa, Building Manageable Autonomic Control Loops for Large Scale Systems, 5 July 2013, Lionel Seinturier & Romain Rouvoy.
- PhD in progress: Maxime Colmant, Amélioration de l'efficience énergétique des logiciels dans les systèmes multi-coeurs, October 2013, Lionel Seinturier & Romain Rouvoy.
- PhD in progress: Benoit Cornu, Automated Runtime Software Repair, October 2012, Lionel Seinturier & Martin Monperrus.
- PhD in progress: Alexandre Feugas, Maintien de la qualité de service au cours de l'évolution d'applications orientées services, October 2010, Laurence Duchien & Sébastien Mosser (Lab. I3S, University Nice-Sophia-Antipolis).
- PhD in progress: Maria Gomez Lacruz, Self-Optimization of Software Systems Driven by Wisdom of the Crowds, October 2013, Lionel Seinturier & Romain Rouvoy.
- PhD in progress: Nicolas Haderer, AntDroid: Opportunistic Mobile Sensing of User Activities, October 2010, Lionel Seinturier & Romain Rouvoy.
- PhD in progress: Geoffrey Hecht, Auto-optimisation des architectures orientées services : Application aux applications mobiles et Cloud, October 2013, Laurence Duchien & Romain Rouvoy.
- PhD in progress: Matias Martinez, Automated Program Repair at Development and Runtime, October 2011, Laurence Duchien & Martin Monperrus.
- PhD in progress: Vincenzo Musco, Etude de la topologie et de l'évolution des graphes logiciels, October 2013, Philippe Preux (Inria SequeL) & Martin Monperrus.
- PhD in progress: Adel Noureddine, Towards a Better Understanding of the Energy Consumption of Software Systems, October 2010, Defense planed on 19 March 2014, Lionel Seinturier & Romain Rouvoy.
- PhD in progress: Fawaz Paraïso, Interopérabilité des environnements middleware de cloud computing, October 2011, Lionel Seinturier & Philippe Merle.
- PhD in progress: Clément Quinton, Migration d'applications dans les environnements middleware de cloud computing, October 2011, Laurence Duchien.
- PhD in progress: Marc Sango, Composants logiciels, boucle de contrôle et adaptation pour applications safety critical dans le domaine ferroviaire, October 2012, Laurence Duchien & Christophe Gransart.
- PhD in progress: Amal Tahri, Evolution logicielle multi-vues : des réseaux domestiques au Cloud, March 2013, Laurence Duchien & Jacques Pulou (Orange).
- PhD in progress: Bo Zhang, Elasticité spontanée des services et infrastructures dans le Cloud, October 2013, Lionel Seinturier & Romain Rouvoy.

9.2.3. *Juries*

Laurence Duchien was in the following HDR examination committee:

• Vasile-Marian Scuturici, INSA Lyon, University Claude Bernard Lyon1, December 2013 (referee)

Laurence Duchien was in the following PhD examination committees:

- Pengfei Liu, University of Bordeaux, January 2013, (referee),
- Mehdi Chouiten, University of Evry-Val d'Essone, January 2013, (co-referee),
- Diana Guadalupe Moreno-Garcia, University of Grenoble, February 2013 (referee),
- Jimmy Lauret, University of Toulouse, April 2013, (referee),
- Thibaut Possompès, University of Montpellier, October 2013 (referee),
- Julie Hamon, University Lille 1, November 2013 (chair),
- Rémi Druilhe, University Lille 1, December 2013 (co-director),
- Sylvain Frey, Paris-Tech, December 2013 (referee),
- Aurélien Favarelon, University of Grenoble, December 2013 (referee).

Romain Rouvoy was in the following PhD examination committees:

- Mehdi Chouiten, University of Evry-Val d'Essone, January 2013, (co-referee),
- Russel Nzekwa, University Lille 1, July 2013 (co-director).

Lionel Seinturier was in the following HDR examination committee:

• Tomas Bures, Charles University, Prague, March 2013 (referee).

Lionel Seinturier was in the following PhD examination committees:

- François Fouquet, University Rennes 1, February 2013 (referee),
- Gérard Nicolas, Telecom Paris, June 2013 (referee),
- Russel Nzekwa, University Lille 1, July 2013 (co-director),
- Ali Ghaddar, University of Nantes, July 2013 (referee),
- Elmedhi Damou, University Grenoble 1, October 2013 (referee),
- Joao Americo, University Grenoble 1, November 2013 (referee),
- Olga Melekhova, University Paris 6, November 2013 (referee),
- Filip Křikava, University of Nice, November 2013 (referee),
- Yacine Kessaci, University Lille 1, November 2013 (president),
- Rémi Druilhe, University Lille 1, December 2013 (co-director),
- Miruna Stoicescu, University Toulouse, December 2013 (referee),
- Petr Spacek, University Montpellier 2, December 2013 (referee),
- Sana Fathallah, University of Nice, December 2013 (referee).

9.3. Popularization

Christophe Ribeiro gave several demonstrations of the APISENSE platform (see Section 5.1), especially for the Recherche, Innovation, Creation (RIC) day that was held on 1 October 2013 in Lille and that targets graduate students from the M.Sc and Computer Engineering programs. He also participated to the Forum des PME innovantes organized the PICOM competitivity cluster on 16 October 2013. The APISENSE platform has been the subject of some popularization articles in ERCIM News [24] and L'Usine Nouvelle [51].

The PowerAPI library (see Section 5.3) has been the subject of some popularization articles in ERCIM News [23], GreenIT.fr [49] and 01 Business & Technologies [50].

FUN Project-Team

8. Dissemination

8.1. Scientific Animation

8.1.1. Conference organization

Program (co-)chairs

 Nathalie Mitton is/was program chair or co-program chair for WiMob 2013, OpenWorldForum 2013 (IoT Track) and IoT-IP 2013.

Program committee members

- Nathalie Mitton is/was in the Technical Program Committee (TPC) for Algotel'14, WPMC'14, SecAN'14, WinSys 2014, MDM 2014, SensorNets 2014, MDM 2013, WWASN2013, AdHoc-Nets 2013, EUSPN 2013, MC3 2013, AdHocNow 2013, HuMoComp 2013, MDM 2013, WWASN2013, Africomm 2013, WWASN2013.
- Tahiry Razafindralambo is/was a TPC member for WiMob 2013, MSWIM 2013, PE-WASUN 2013.
- Valeria Loscri is/was TPC member for WiMob2013, NTMS2013, IoTIP2013, MC3 2013.

Other chairing

• Valeria Loscri was publicity chair for IoT-IP 2013.

8.1.2. Editorial activity

- Nathalie Mitton is editorial board members of AHSWN since 2011.
- Nathalie Mitton is editorial board member of Adhoc Networks since 2012.
- Nathalie Mitton is editorial board member of IET-WSS since 2013.
- Nathalie Mitton and David Simplot-Ryl edited the book "Wireless sensor and robot networks: from topology control to communication aspects", to be published in February 2014.

8.1.3. Misc

- Nathalie Mitton was member of the ANR programme blanc SIMI3 for 2013.
- Nathalie Mitton a member of the Inria COST-GTAI and Building User committee (CUB).
- Nathalie Mitton was vice-president of the Technological development committee (CDT) in 2013 and will be president from January 2014.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Master : Nathalie Mitton, Wireless sensor networks, 36h eqTD (Master TIIR and MINT), Université Lille 1 and Telecom Lille 1, France

Master : Nathalie Mitton, RFID Middlewares, 16h eqTD, Institut Telecom and Université Lille 1, France

Master: Valeria Loscri, Digital Transmission - Course of Master Science in Engineering of Telecommunication Course (University of Calabria)

Post-Master: Valeria Loscri, KOM4T me: Knowledge Management 4 info Telemati in Mobile Environment (post-master course for expert in knowledge management systems applied to the context of infotainment for vehicular environments, organized by University of Calabria, Infomobility Spa, Magneti Marelli Spa, Info Blu Spa) - 100 hours

8.2.2. Supervision

HdR: Tahiry Razafindralambo, Mouvements autonomes: de la créativité dans les réseaux sans fil, Université Lille 1, December 5th 2013

PhD : Karen Miranda, Self-deployment algorithms for substitution networks, Université Lille 1, December 10th 2013, Tahiry Razafindralambo and David Simplot-Ryl

PhD: Tony Ducrocq, Auto-organisation des réseaux sans-fil multi-sauts dans les villes intelligentes, Université Lille 1, November 15th 2013, Nathalie Mitton and Michael Hauspie

PhD : Milan Erdelj, MobileWireless Sensor Network Architecture: Applications to Mobile Sensor Deployment, Université Lille 1, October 11th 2013, Tahiry Razafindralambo and David Simplot-Ryl

PhD : Nicolas Gouvy, Routage géographique dans les réseaux de capteurs et actionneurs sans fil Université Lille 1, September 19th 2013, Nathalie Mitton

PhD in process: Riccardo Petrolo, Internet of Things and Smart Cities, Université Lille 1, 2013-2016, Nathalie Mitton and Valeria Loscri

PhD in process: Viktor Toldov, : Interférence et consommation dans les réseaux de capteurs, Université Lille 1, 2013-2016, Nathalie Mitton and Laurent Clavier

PhD in process: César Marchal, Sécurité dans les réseaux de capteurs - Du routage à la pertinence des données, Université Lille 1, 2013-2016, Nathalie Mitton

PhD in process: Natale Guzzo, Auto - organisation et économie d'énergie dans un réseau sans fil de surveillance de fret, Université Lille 1, 2013-2016, Nathalie Mitton

PhD in process: Roudy Dagher, Géolocalisation en environnement réel, extérieur et intérieur avec réseau de capteurs, Université Lille 1, 2013-2016, Nathalie Mitton

8.2.3. Juries

- Nathalie Mitton was committee member of the following PhD thesis:
 - Julien Beaudaux, Université de Strasbourg, France, June 2013
 - Raul Gorcitz (reviewer), UPMC, Paris, July 2013
 - Alhem Riggani, UPMC, Paris, January 2014
 - Arnab Sinha, Inria Rennes, February 2014
 - Rafik Kheddam, Esisar, February 2014
- Nathalie Mitton was member of the CR2 Lille competition selection committee.
- Nathalie Mitton was member of the Boost Your Code 2013 competition jury.
- Nathalie Mitton was a member of the COS (associate professor selection committee) for INSA de Lyon and Université de Reims.

8.3. Popularization

- Tahiry Razafindralambo gave a popularization talk "Introduction to Wireless Sensor Networks" at Distributed Computing Department / Universidad de Chile.
- Nathalie Mitton gave a talk on "Introduction to RFID" to Terminales ES and S and "Introduction to Wireless Sensor Networks" to 4e and 3e in the framework of "Journées de la Science".
- Ibrahim Amadou gave a talk on "Introduction to Wireless Sensor Networks" in the framework of "Journées de la Science".

RMOD Project-Team

9. Dissemination

9.1. Scientific Animation

9.1.1. Organization

- Guillermo Polito helped organizing the *Uqbar Workshop* (November 2013) in Argentina.
- Damien Cassou: DYLA 2013, 7th Workshop on Dynamic Languages and Applications. Colocated with ECMFA, ECOOP and ECSA, 1–5 July, Montpellier, France.
- Stéphane Ducasse and Marcus Denker: Part of the organizaton team of ESUG 2013, 21th International Smalltalk Conference, Annecy, France 9-13 September 2013.

9.1.2. PC Memberships and Reviewing

- Anne Etien
 - ECMFA 2013, European Conference on Modelling Foundations and Applications.
 - IWST 2013, International Workshop on Smalltalk Technologies.
 - ME 2013, Models and Evolution
 - SLE 2013, International Conference on Software Language Engineering.

Marcus Denker

- DLS 2013, Dynamic Languages Symposium at SPLASH.
- Varicomp 2013, International Workshop on Variability and Composition.
- ICSM 2013 Tool Demo Track, International Conference on Software Maintance.
- SCAM 2013 Tool Paper Track, IEEE International Working Conference on Source Code Analysis and Manipulation.
- SLE 2013, International Conference on Software Language Engineering. External Reviewer.

Damien Cassou

- aec-esec FSE 2013, ACM SIGSOFT Symposium on the Foundations of Software Engineering.
- ASE 2013, 28th IEEE/ACM International Conference on Automated Software Engineering.
- DYLA 2013, 7th Workshop on Dynamic Languages and Applications.
- WASDETT 2013, 4th International Workshop on Academic Software Development Tools and Techniques.

Nicolas Anquetil:

- ICSM 2013, International Conference on Software Maintance.
- ECOOP/ECMFA/ECSA 2013 Doctoral Symposium.
- Reviewer EMSE (Empirical Software Engineering journal).
- Reviewer SCICO (Science of Computer Programming journal).

9.1.3. Memberships

 Marcus Denker is a member of DFGWT - Deutsch-Französische Gesellschaft für Wissenschaft und Technologie e.V (Associaton Franco-Allemande pour la Science et la Technologie) (from August 2013). • Nicolas Anguetil and Anne Etien are member of IEEE. (from July 2013).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master: C. Demarey, Architectures Logicielles, 30h (M1), GIS4, Polytech'Lille, France Misc: Stéphane Ducasse, Ecoles des jeunes chercheurs Inria (2013), 6h, Inria, France

Licence: Stéphane Ducasse, Cours IAE (2013), 14h, Annecy, France

Master: Stéphane Ducasse, Cours Ecole des Mines de Douai (2013), 12h, France Master: Stéphane Ducasse, Cours USTL L3 (2013), 4.5h, Université Lille, France

Master: Stéphane Ducasse, Cours University of Quilmes, 2h, Argentina

Master: Stéphane Ducasse, Cours University of Lviv, 12h, Ukraine

Master: Stéphane Ducasse, Cours University of Buenos Aires, 3h, Argentina Master: Stéphane Ducasse, Cours FIT Prague (dec 2013), 8h, Czech Republic

Licence: Nicolas Anquetil, Software engineering: Testing techniques, 40h, (L2), IUT-A Lille,

France Licence: Nicolas Anquetil, Interface programming in Java/Swing, 48h, (L2), IUT-A Lille, France

Licence: Anne Etien, Java, Course: 30h (L3), Polytech Lille, France

Master: Anne Etien, Object Information System, TP: 8h (M1), Polytech Lille, France

Master: Damien Cassou, Algo, 24h, Université Lille 1, France

Master: Damien Cassou, COO, 18h, Université Lille 1, France

Master: Damien Cassou, [OPL] Test, maintenance & évolution, 12h, Université Lille 1, France

Master: Damien Cassou, Qualité logicielle, 30h, Universite' Lille 1, France

Master: Damien Cassou, CAR, 24h, Université Lille 1, France

Master: Damien Cassou, COA, 24h, Université Lille 1, France

License: Damien Pollet, UV info, 100h, Introduction to OO programming in Java, Telecom Lille, France

Master: Damien Pollet, SER, 25h, Distributed Algorithms, Telecom Lille, France

Master: Damien Pollet, ILOG & TSIO, 35h, Programming & Software engineering, Telecom Lille, France

Master: Damien Pollet, Supervision of industry internships, Telecom Lille, France

Master: Guillermo Polito, Cours University of Quilmes, 2h, University of Quilmes, Argentina

9.2.2. Supervision

PhD: Jean Baptiste Arnaud, Towards First Class References as a Security Infrastructure in Dynamic Languages, 18/02/2013, Marcus Denker, Stéphane Ducasse

PhD: Nick Papoylias, Languages and Development Environments for Mobile Autonomous Robots, 19/12/2013, Marcus Denker, Stéphane Ducasse

PhD in progress: Camillo Bruni, Entering the 4th Quadrant, 01/03/2011, Stéphane Ducasse, Marcus Denker

PhD in progress: Andre Hora, Improving Static Analysis with Domain-Specific Rules, 01/12/2011, Nicolas Anquetil, Stéphane Ducasse

PhD in progress: Camille Teruel, Security for dynamic languages, 01/12/2012, Stéphane Ducasse, Damien Cassou

PhD in progress: Martin Dias, Supporting Merging, 03/12/2012, Damien Cassou, Stéphane Ducasse PhD in progress: Guillermo Polito, Isolation and Reflection in Dynamic Object Oriented Languages, 01/04/2012, Noury Bouraqadi, Luc Fabrese, Marcus Denker, Stéphane Ducasse

9.2.3. Juries

Stéphane Ducasse was in the examination committee of the following PhD theses:

- F. Olivero, Lugano, 02/2013 (reviewer)
- Q. Sabah, Grenoble 12/2013 (examinator)

Anne Etien was in the examination committee of the following PhD theses:

• D. Blouin, Lorient, 10/12/2013

9.3. Popularization

- Marcus Denker gave a presentation about Pharo at the open source conference FOSDEM 2013.
- Web with Pharo Conference was held 6 June 2013 @ Euratechnologies, Lille.
- Camille Teruel and Damien Cassou gave a Pharo tutorial at ECOOP 2013 Montpellier. Slides got >16000 hits after a mention on ycombinator news (http://www.lirmm.fr/ecoop13/?id=158#tutorial13)
- *RIC Day* was held 2 October 2013 @ University of Lille 1, Lille, Anne Etien gave a presentation about Moose and software maintenance.
- Tutorials at ESUG 2013, Annecy, France in September.
- Esteban Lorenzano and Guillermo Polito gave multiple Presentations at Smalltalks 2013 (Argentina):
- Guillermo Polito gave a lecture about *Pharo Ninja Tricks* at Universidad de Quilmes / Argentina in November (a hands-on showing how to use the IDE and explore the system, open classes, extension methods...).
- Marcus Denker gave a lecture and a public talk at *Universitat Politecnica de Catalunya*, Barcelona, Spain.
- Software Maintenance Courses (Nicolas Anquetil):
 - IJDs Inria Lille Nord Europe, with Guillaume Larcheveque, 1 day
 - Thales, 1 day
- Stéphane Ducasse gave multiple lectures and talks at University of Prag in December 2013.
- Organization of the MooseDay in Lille on the 19th December with around 25 persons from all around the world. (http://www.lifl.fr/~etien/MooseDay.html).
- Multiple public Pharo Sprints in Lille, Santiago/Chile, Buenos Aires/Argentina and other places.

LINKS Team

8. Dissemination

8.1. Scientific Animation

8.1.1. Organization of Workshops

A two-days workshop on Data-centric Web Services has been organized by Bourhis and Niehren in October 2003. The workshop gathered together researchers from Inria Lille, Inria Rennes, Inria Saclay and Université Marne La Vallée.

8.1.2. Invited Talks

- P. BOURHIS was invited to give a talk at the Journées Complexité et Modèles Finis 2013 60 ans d'Etienne Grandjean, on "Containment of monadic datalog for general structures".
- S. TISON, J. NIEHREN, A. LEMAY and A. BOIRET were invited in a Dagstuhl seminar on Tree Transducers and Formal Methods.

8.1.3. Program Committees

- J. NIEHREN is member of the editorial board of FUNDAMENTA INFORMATICAE. He was in the program committees of STACS (Symposium on Theoretical Aspects of Computer Science) 2014 and TTATT (International Workshop on Trends in Tree Automata and Tree Transducers) 2013.
- I. BONEVA was member of the program committee of ADBIS (East-European Conference on Advances in Databases and Information Systems) 2013. She was external reviewer for CIIA 2013 and TOIT.
- A. BONIFATI was Chair of WebDB (International Workshop on the Web and Databases) 2013. She was also member of the program committees of SIGMOD (International Conference on Management of Data) 2013, VLDB (International Conference on Very Large Databases) 2013 and EDBT (International Conference on Extending Data- base Technology) 2013. She was a member of the program committee of BDA (Journées Bases de Données Avancées) 2013. She is a member of the program committee of ICDE (International Conference on Data Engineering) 2014, VLDB 2014, SIGMOD 2014, EDBT 2014, and ICDT (International Conference on Database Theory) 2015.
- P. BOURHIS was member of the program committee of BDA (Journées Bases de Données Avancées) 2013 and of the CIKM PhD Workshop (PIKM) 2013. He was external reviewer for PODS 2013, TKDE and Information Systems.
- S. STAWORKO was member of the program committee of ICDT 2013 and WebDB 2013 (International Workshop on the Web and Databases).
- S. TISON is member of the steering committee of RTA (International Conference on Rewriting Techniques and Applications) and STACS (Annual Symposium on Theoretical Aspects of Computer Science). She is member of the editorial committee of RAIRO-ITA. She is member of the program committee of Highlights of Logic, Games and Automata 2013 and LATA (International Conference on Language and Automata Theory and Applications) 2014.

8.1.4. French Scientific Responsibilities

- A. BONIFATI, serves in the vivier of Université Lille 1.
- J. NIEHREN serves in the vivier of Université Lille 1.

S. TISON is head of the computer science lab in Lille (LIFL). She is elected member of the "Comité National de la Recherche Scientifique (CoNRS)" (Section 6) and of the IUF senior committee 2013. She was president of the scientific and technical council of the cluster "Pôle de Compétitivité Industries du commerce" and she is member of the administrative board of the cluster Pictanovo. She serves in the vivier of Université Lille 1, where she was member of the selection committee for professor positions. She was also member of the selection committee for professor positions in Marseille.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Master (Mocad): Information extraction, 18h, M2, Université Lille 1, France by J. NIEHREN Master (Mocad): Information extraction, 18h, M2, Université Lille 1, France by A. BONIFATI

License: Introduction to Databases, 54h, L3, Université Lille 1, France by A. BONIFATI

Master: XML technologies: Sax and DOM, 18h, M1, Université Lille 3, France by D. DEBARBI-EUX

Licence: Propositional Logic, 18h, L2, Université Lille 3, France by S. STAWORKO

Master: Modelization XML, 24h, M1, Université Lille 3, France by S. STAWORKO

Licence: Artificial Intelligence and Logic, 63h, L3, Université Lille 3, France by S. STAWORKO

Master: Introduction to XML, 40h, M1, Université Lille 3, France by S. STAWORKO

Master: Advanced algorithms and complexity, M1, 57h, Université Lille 1, by S. TISON

Master: XML Technologies, 16h, M2, Université Lille 3, France by A. LEMAY

8.2.2. Supervision

PhD in Progress: R. CIUCANU, Cross-model queries and schema mappings: evaluation and learning. Since Sept. 2012. Supervised by Bonifati.

PhD in Progress: G. LAURENCE, Learning XML transformations for data exchange on the web. Since Sept. 2008. Submitted in January 2014. Supervised by Tommasi, Niehren, Staworko and Lemay.

PhD in Progress: A. M. NDIONE, Probabilistic algorithms for tree automata and transducers. Since Sept. 2010. Submitted in January 2014. Supervised by Niehren and Lemay.

PhD in Progress: T. SEBASTIAN, Streaming algorithms for XSLT. Since May 2011. Supervised by Niehren.

PhD in Progress: A. BOIRET, Top-down tree transformations with look-ahead: foundations and learning. Since Sept. 2011. Supervised by Niehren and Lemay.

PhD in Progress: K. BATMANOV submitted in January 2014. Supervised by Niehren

PhD in Progress: G. MADELAINE. Co-supervised by Niehren (2012-2015).

8.2.3. Juries

- A. BONIFATI was in the PhD committee of Federico Cavalieri at Universitá di Genova, Italy.
- J. NIEHREN was the supervisor of the HdR of Cédric Lhoussaine at Université de Lille 1 in December 2013.
- J. NIEHREN was in the HdR committee of Pierre Senellart at Paris Telecom in July 2013.
- J. NIEHREN was the president of the PhD committee of Evgenia Kopylova from the Bonsai group at the University of Lille 1 in Dec 2013.
- S. STAWORKO was in the PhD committee of Alexandre Decan at Université de Mons, Belgium.
- S. TISON was in the HdR committee of Sébastien Picault and in the PhD committee of Julie Jacques, at the Université Lille 1. She was in the PhD committees of Vincent Hugot and Elena Tushkanova at Université de Franche-Compté. She was in the HdR committee of Nabil Layaida in Grenoble.

8.3. Popularization

Within the Initiative 'Chercheurs à l'École' during the 'Fête de la science 2013' in October, Iovka Boneva has done presentations for high-school students in two lyceums in Villeneuve d'Ascq and Marcq en Baroeul.

MAGNET Team

9. Dissemination

9.1. Scientific Animation

9.1.1. Invited Talks

FABIO VITALE was invited to give a talk at the Computer Science department of Copenhagen University in November 2013 on the topic of *Machine Learning on Trees and Graphs*.

9.1.2. Program Committees

PASCAL DENIS served as member of the program committee of ACL 2013, EACL 2013, EMNLP 2013, *SEM 2013.

ANTONINO FRENO served as member of the program committee of ECML-PKDD 2013.

MIKAELA KELLER was reviewer for ECML-PKDD 2013.

FABIEN TORRE served as member of the program committee of IClaNov workshop at ICDM 2013, ICPRAM 2014, EGC 2014, CluCo workshop at EGC 2014.

MARC TOMMASI served as member of the program committee of CAP 2013 and CIAA 2013.

9.1.3. Hiring Committees

MIKAELA KELLER served as member of the hiring committee for a MdC position at University of Calais. and as member of the hiring committee for a MdC position at University of Lille 3.

RÉMI GILLERON served as member of the hiring committee for a MdC position at University of Saint Etienne.

MARC TOMMASI served as member of the hiring committee for a MdC position at University of Lille 3 and as member of the hiring committee for a Professor position at University of Paris 6.

9.1.4. Other Committees

PASCAL DENIS served as reviewer for the French National Research Agency (ANR), Programme Blanc.

MIKAELA KELLER served as reviewer for the French National Research Agency (ANR), Programme Blanc.

FABIEN TORRE is elected member of Conseil national des universités (Section 27).

MARC TOMMASI served as member of the SIMI2 committee of the French National Research Agency (ANR). He is also coordinator for the ANR Lampada project.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master MOCAD: PASCAL DENIS, Extraction d'information, 18h, M2, Université Lille 1, France

Master MOCAD: Antonino Freno, Extraction d'information, 16h, M2, Université Lille 1, France

RÉMI GILLERON is in charge of master MIASHS at Université Lille 3, France

Master MIASHS: RÉMI GILLERON, Classification supervisée, 36h, M1, Université Lille 3, France

Master MIASHS: RÉMI GILLERON, Classification non supervisée, 24h, M1, Université Lille 3, France

Master MIASHS: RÉMI GILLERON, Recherche d'information, 24h, M1, Université Lille 3, France

Master MIASHS: RÉMI GILLERON, Web sémantique, 36h, M2, Université Lille 3, France

Master MIASHS: RÉMI GILLERON, Programmation R, 24h, M1, Université Lille 3, France

Licence EMO: RÉMI GILLERON, Cours bases de données, 18h, L3, Université Lille 3, France

Licence MIASHS: RÉMI GILLERON, Programmation Python, 36h, L1, Université Lille 3, France

Licence: MIKAELA KELLER, Apprentissage statistique, 63h, L3, Université Lille 3, France

Master LTTAC: FABIEN TORRE, Traitements automatiques des textes, 55.5h, M1, Université Lille 3, France

Master IDEMM: FABIEN TORRE, Langages du web, 37.5h, M2, Université Lille 3, France

Master GIDE: FABIEN TORRE, Algorithmique et programmation PHP pour le web, 75h, M2, Université Lille 3, France

Master ICDD: FABIEN TORRE, Internet et ses langages, 37h, M1, Université Lille 3, France

Master ID: MARC TOMMASI, Réseaux, 60h, M1, Université Lille 3, France

Master ICCD: MARC TOMMASI, Représentation et codage de l'information, 37h, M1, Université Lille 3, France

9.2.2. Supervision

PhD in progress: THOMAS RICATTE, Learning in Multiple Graphs with Hypergraphs, Université Lille 3, since Sept. 2011, Marc TommasiLille, scheduled for June 2014, MARC TOMMASI, RÉMI GILLERON, and GEMMA GARRIGA

PhD in progress: DAVID CHATEL, Supervised Spectral Clustering and Information Diffusion in Graphs of Texts, Université Lille 1, since Sept. 2012, PASCAL DENIS and MARC TOMMASI

PhD in progress: PAULINE WAUQUIER, Recommendation in Information Networks, Université Lille 1, since Dec. 2013 supervised by MARC TOMMASI and MIKAELA KELLER

PhD in progress: AHMAD HOSSEINI, Machine Learning for Information Diffusion in Graphs, Université Lille 1, since Dec. 2013, MARC TOMMASI and MIKAELA KELLER and PHILIPPE PREUX

PhD in progress: Grégoire Laurence, Learning Tree Transducers, Université Lille 1, since Sept. 2008, MARC TOMMASI and JOACHIM NIEHREN

PhD in progess: Jean Decoster, Relation learning for XML documents, Université Lille 1, since Sept. 2009, FABIEN TORRE and RÉMI GILLERON

PhD in progress: EMMANUEL LASSALLE, Improved Coreference Resolution with Feature Space Learning, Université Paris-Diderot, since Sept. 2010, PASCAL DENIS and LAURENCE DANLOS (Université Paris-Diderot)

PhD in progress: CHLOÉ BRAUD, Discourse Relation Identification from Labeled and Unlabeled Data, Université Paris-Diderot, since Sept. 2011, PASCAL DENIS and LAURENCE DANLOS (Université Paris-Diderot)

9.2.3. Juries

RÉMI GILLERON was member of the PhD committee of Emilie Morvant, Université de Marseille, France

MINT Project-Team

8. Dissemination

8.1. Scientific Animation

8.1.1. Invited Talks

- "Future generation of tactile stimulators": F. Giraud, Haptic Forum organized by the Femto-ST (november 30th)
- "Past interfaces still have a future": N. Roussel, LIRMM, Montpellier (April 11th)
- "Perception-action coupling for Human-Computer Interaction": N. Roussel, Inria Executive Committee (February 6th)

8.1.2. Journal reviewing

- Transactions on Computing and Cultural Heritage (ACM): T. Pietrzak, D. Marchal
- Transactions on Applied Perception (ACM): T. Pietrzak
- Transactions on Haptics (IEEE): T. Pietrzak, B. Semail
- Transactions on Visualization and Computer Graphics (IEEE): F. Chevalier
- Technique et Science Informatique (Lavoisier) special issue on big data visualization: F. Chevalier (program committee)

8.1.3. Conference organization

- ACM CHI: G. Casiez, PC member and member of the best paper committee; N. Roussel, video showcase co-chair
- ACM UIST: F. Chevalier, PC member
- IEEE 3DUI: G. Casiez, PC member
- ACM EICS: N. Roussel, PC member
- ACM SUI: G. Casiez, PC member
- IEEE VIS, : F. Chevalier, fast-forward co-chair
- IEEE BigData Congress: F. Chevalier, PC member
- IHC (Simpósio de Fatores Humanos em Sistemas Computacionais): N. Roussel, PC member
- IHM: N. Roussel, co-president; F. Chevalier, tutorials and workshops co-chair; G. Casiez & T. Pietrzak, PC members
- fOSSa: N. Roussel, PC member
- Journée IHM-IA: N. Roussel, co-organizer
- EPE 2013: B. Semail, general chairman

8.1.4. Conference reviewing

- ACM CHI: G. Casiez, F. Chevalier, T. Pietrzak, N. Roussel
- ACM UIST: G. Casiez, F. Chevalier
- ACM EICS: N. Roussel
- IEEE PacificVis: F. Chevalier
- ACM ITS: G. Casiez
- GI: G. Casiez
- TEI: G. Casiez

- IFIP Interact: T. Pietrzak, N. Roussel
- IHC (Simpósio de Fatores Humanos em Sistemas Computacionais): N. Roussel
- IHM: G. Casiez, F. Chevalier, T. Pietrzak, D. Marchal

8.1.5. Scientific associations

- AFIHM, the French speaking HCI asssociation: N. Roussel and T. Pietrzak, members of the Executive Committee (vice-president and secretary from November 2011 to November 2013)
- EPE, European Power Electronic association: B.Semail is member of the steering committee

8.1.6. Evaluation committees and invited expertise

- Inria's acceptance jury for junior researcher positions: N. Roussel
- Inria Lille's eligibility jury for junior researcher positions: N. Roussel (president)
- ANR SIMI 2 panel (JCJ, Blanc and Blanc international calls): N. Roussel
- Expert reviewer for EPSRC (United Kingdom): N. Roussel
- Expert reviewer for Digiteo-DigiCosme: G. Casiez
- Expert reviewer for MITACS (Canada): G. Casiez

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence: T. Pietrzak; Compilation, 36h, L3, Univ. Lille 1

Licence: T. Pietrzak; Algorithms and data structures, 36h, L3, Univ. Lille 1

Licence: T. Pietrzak; Automatas and Logic, 55h, L2, Univ. Lille 1

Licence: N. Roussel; Algorithms and imperative programming, 64h, L1, Univ. Lille 1

Licence: G. Casiez; Algorithms and imperative programming, 64h, IUT A, Univ. Lille 1

Licence: G. Casiez; Databases, 48h, IUT A, Univ. Lille 1

Licence: F. Aubert; Introduction to Programming, 48h, L1, Univ. Lille 1

Licence: F. Aubert; Algorithms and imperative programming, 36h, L3, Univ. Lille 1

Master: G. Casiez, L. Grisoni, P. Plénacoste & T. Pietrzak; Human-Computer Interaction, 48h, M1, Univ. Lille 1

Master: G. Casiez & F. Aubert; Multi-Touch Interaction, 24h, M1, Univ. Lille 1

Master: F. Aubert; Computer Graphics, 48h, M1, Univ. Lille1

Master: L. Grisoni & F. Aubert; Advanced 3D modeling, 20h, M2, Univ. Lille 1

Master: G. Casiez & L. Grisoni; Artificial Vision, 12h, M2, Univ. Lille 1

Master: G. Casiez; Multitouch interaction, 7h, M2, Telecom Lille 1

Master: G. Casiez, D. Marchal, F. Aubert & T. Pietrzak; Virtual Reality, 36h, M2, Univ. Lille 1

Master: D. Marchal; Introduction to Unity for Virtual Reality, 10h, M2, Univ. Lille 1

Master: D. Marchal; Game Developement with Unity, 21h, Formation professionnelle, Univ. Lille 1

Introduction to HCI, haptics and computer graphics, 12h, Ecole Centrale de Lille (G2): N. Roussel

8.2.2. Supervision

PhD in progress: Alix Goguey, "Interacting between physical and digital tools", Univ. Lille 1, started October 2013, co-advised by G. Casiez and T. Pietrzak

PhD in progress: Andéol Evain, "Smart user interfaces based on BCI", Univ. Rennes 1, started September 2013, co-advised by A. Lecuyer (in Rennes), G. Casiez and N. Roussel

PhD in progress: Jonathan Aceituno, "Designing the ubiquitous desktop", Univ. Lille 1, started October 2011, advised by N. Roussel

Yosra Rekik, "Multi-finger gestural interaction", Univ. Lille 1, started September 2010, co-advised by L. Grisoni and N. Roussel

PhD in progress: Jérémie Gilliot, "Interactions multi-points indirectes sur grands écrans", Univ. Lille 1, started December 2010, co-advised by N. Roussel and G. Casiez, defense expected in February 2014

PhD in progress: David Selosse, "Annotation interactive de modèles 3D, application à la reconstruction", Univ. Lille 1, started October 2009, co-advised by L. Grisoni and J. Dequidt

PhD: Gina Craciun, "Nouvelles interfaces pour la simulation des opérations d'assemblage dans des environnements virtuels", Suceava Univ. (Romania), defended, co-advised by L. Grisoni and S-G. Pentiuc

PhD: Yi Yang, "Design and Control of an integrated haptic interface for touch screen applications", Beihang University, November 2013, co-supervised by B.Semail, Yuru Zheng (in Beihang University) and M. Amberg

PhD in progress: Wael Ben Messaoud, "Développement et contrôle d'un stimulateur tactile pour textures réelles", University Haute-Alsace, started september 2012, co-supervised by B. Semail and M.-A Bueno (in University Haute-Alsace)

PhD in progress: Sofiane Ghenna, "Modélisation et commande multimodales d'actionneurs piézoélectriques", Univ. Lille1, started October 2013, co-supervised by F.Giraud and C. Giraud-Audine (Arts et Métiers Paris Tech)

PhD in progress: Eric Vezzoli, "Analysis of the interaction between a fingertip and a surface in case of a global tactile stimulation", Univ. Lille1, supervised by B. Semail

PhD in progress: Thomas Sednaoui, "Design and optimization of tactile stimulators", Univ. Lille1, co-supervised by B. Semail and C. Chappaz (ST-Microelectronics)

PhD in progress: Nicolas Bremard, "Interaction hybride via smarthphone", Univ. Lille1, started December 2012, co-advised by L. Grisoni and F. Aubert

8.2.3. Juries

PhD committees

- Cyprien Pindat (Univ. Paris-Sud, December): G. Casiez, reviewer
- Huiyuan Cao (Université de Technologie de Compiègne, November): N. Roussel, reviewer
- Dong-Bach Vo (Télécom ParisTech, September): N. Roussel, reviewer
- Simon Perrault (Télécom ParisTech, May): G. Casiez, reviewer
- Bérenger Arnaud (Univ. Montpellier 2, April): N. Roussel, reviewer
- Mikaël Martin (Ensam ParisTech, November): F. Giraud, reviewer
- Edouard Leroy (CEA, Polytechnique, December), B. Semail reviewer

8.3. Popularization

- "Douglas Engelbart, inventeur et visionnaire", an article for the Interstices web site (J. Aceituno & N. Roussel, December 20th)
- MIRIM, an installation within Inria's demonstration area at EuraTechnologies to illustrate the experimental nature of HCI research (M. Amberg, M-A. Dupré & N. Roussel, starting from October)
- Interview with Benoit Georges, from Les Echos, published as a supplement to his article on novel interfaces for tablets, smartphones and computers (N. Roussel, October 14th)

- *Chercheurs itinérants*: brief introduction to research topics for high-school students (J. Aceituno, L. Grisoni, L. Potier, H. Rateau, Y. Rekik & N. Roussel, October)
- Invited talk for a group of high-school teachers from Nice academy involved in the ISN (*informatique* et sciences du numérique) specialty (N. Roussel, June 4th)
- Co-organization of the press and VIP tour of the interactive exhibition of the ACM CHI conference in Paris (N. Roussel, April 29th)
- "A propos de l'interaction homme-machine", a podcast for the Interstices web site (N. Roussel, April 26th)
- Invited talk as part of the launch of the 2013 "Questions numériques" publication by FING (N. Roussel, February 21st)