Activity Report 2019

Section Popularization

COAST Project-Team (section vide)

CTRL-A Project-Team

10.3. Popularization

10.3.1. Interventions

- National events:

  During the 2019 edition of Fête de la Science, Raphaël Bleuse co-hosted with Clément Mommessin (DataMove team) six one-hour popularization sessions. These sessions introduce the concept of infinity, and detail key milestones towards its construction in the modern mathematics for high-school students.

DELYS Project-Team

8.3. Popularization

8.3.1. Articles and contents

- Swan Dubois and Franck Petit coauthored the book entitled "*Introduction to Distributed Self-Stabilizing Algorithms*" [35], that aims at being a comprehensive and pedagogical introduction to the concept of *self-stabilization*.

- Marc Shapiro co-authored two entries for the Encyclopedia of Big Data Technologies (published by Springer, 2019):
    - "Database Consistency Models" [38].
    - "Conflict-Free Replicated Data Types CRDTs" [37].

- Marc Shapiro contributed the post "Living at the edge, safely" to the LightKone blog [6].

MIMOVE Project-Team (section vide)

Myriads Project-Team

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

- Martin Quinson is on the scientific board of the Blaise Pascal foundation, boosting the scientific outreach in the domains of Maths and Computer Science.

9.3.2. Education

- Guillaume Pierre shared his experience as the coordinator of a H2020 Maria Skłodowska Curie Action project with CCRRDT, the Brittany Region's consultative committee for research and technological development. January 14th 2019.

- "L codent L créent" is an outreach program to send PhD students to teach Python to middle school students in 8 sessions of 45 minutes. Tassadit Bouadi (Lacodam), Camille Maumet (Empenn) and Anne-Cécile Orgerie (Myriads) are coordinating the local version of this program, initiated in Lille. The first session in Rennes occured in April 2019, and a new session has started for 2019-2020. The program is currently supported by: Fondation Blaise Pascal, ED MathSTIC, Université Rennes 1 and Fondation Rennes 1.

- "J'peux pas, j'ai informatique" is an outreach program to deconstruct IT stereotypes. Organized over one day, this program welcomes 110 college students (5ème) each year and is coordinated by Anne-Cécile Orgerie. The next event is planned in April 2020.

- Martin Quinson participated to the DIU EIL (Enseigner l'Informatique au Lycée), training existing maths and enginering teachers so that they can teach Informatics in their colleges.

- Martin Quinson is in charge of a M2 lecture on scientific vulgarization at ENS Rennes. The students are asked to come up with new activities (or improve existing ones) on their research field.

- Martin Quinson gave a doctoral teaching on December 13 on scientific outreach targeting either schools or science forums at IRISA laboratory.

9.3.3. Internal action

- Anne-Cécile Orgerie, Martin Quinson and Matthieu Simonin: organize experimenter meetings for the large-scale systems department of IRISA: https://xug.gitlabpages.inria.fr/meetings/

9.3.4. Creation of media or tools for science outreach

- Martin Quinson is working on a set of new outreach activities with his Master 2 class at ENS Rennes since several years. The most promising activities are then tested on field in schools during another lecture at ENS Rennes, at Licence 3 level. All available resources are freely available at https://github.com/InfoSansOrdi/pedago-rennes/.

<p style="text-align:center; color:red;">**SPIRALS Project-Team**</p>

10.3. Popularization

10.3.1. Interventions

Pierre Laperdrix gave a talk in May at the RuhrSec IT security conference organized by the Ruhr University Bochum. The aim of the conference is to popularize different topics to an audience of non-experts so that they are familiar with the latest trends in computer security.

STACK Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- S. Ibrahim, Online publication http://emergences.inria.fr/2019/newsletter-n59/l59-Kerstream: *Un intergiciel post-Hadoop pour gérer les flux de données*.

10.3.2. Articles and contents

As a follow-up of the aLIFE workshop (Nantes, Jan. 2018), organized in partnership with colleagues from IMT Atlantique and gathering both academic and industrial partners, Hélène Coullon and Jacques Noyé have participated to a booklet publication [29] summarizing the workshop discussions and proposing a shared vision of what software research could bring to Industry 4.0 initiatives.

WHISPER Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- Julia Lawall: Chair of the Commission des Emplois Scientifiques, with Mazyar Mirrahimi.

10.3.2. Education

- Julia Lawall: Coccinelle: Practical program transformation for the Linux kernel. Ecole de Jeunes Chercheurs en Programmation.

10.3.3. Interventions

- Julia Lawall: Systèmes d'exploitation. Girls Can Code.

<p style="color:red; text-align:center; font-weight:bold; font-size:large;">WIDE Project-Team</p>

9.3. Popularization

Algorithm Watch wrote an article about a recent work involving Erwan Le Merrer, concernant remote transparency. The article is called "Explainable AI doesn't work for online services – now there's proof". Avaiable at https://algorithmwatch.org/en/story/explainable-ai-doesnt-work-for-online-services-now-theres-proof/.

ALPINES Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- Laura Grigori was vice-president of the Evaluation Commission of Inria, March 2018 - August 2019.

AVALON Project-Team

9.3. Popularization

Yves Caniou est co-fondateur et co-organisateur du Campus du Libre, un événement autour du Libre dont l'objectif est de partager différents aspects du libre et des communs, allant par exemple du logiciel libre (Linux, Firefox, *etc.*) aux espaces communs gérés collaborativement (Wikipedia, OpenStreetMap).
La 2e édition s'est déroulée la journée du samedi 23 novembre 2019.

9.3.1. Articles and contents

- Interviews in order to popularize
  - Laurent Lefèvre was interviewed for the following dissemination media:
    * "En 2025, le numérique pourrait polluer autant que l'automobile", Le guide MAG2lyon du Développement Durable, December 2019
    * Radio show "Le numérique et ses impacts", Radio Fréquence Paris Plurielle, December 20, 2019
    * "L'insoutenable croissance du numérique", Alternatives Economiques, December 19, 2019
    * "Le streaming en expansion, son empreinte écologique aussi", Agence France Presse Dossier, October 28, 2019 - Reprint in Le Soleil, La Presse and le Quotidien (Canada, 28/10/2019), L'écho (France, 28/10/2019), Sciences et Avenir (France, 28/10/2019), L'OBS (France, 28/10/2019), Ouest France (France, 28/10/2019), Le Progrès (France 18/11/2019), DerStandard (Germany, 1/11/2019, "Gratis und ohne Anmeldung: Videostreaming-Dienst Apple TV+ gestartet"), Tierwelt (Germany, 3/11/2019, "STREAMING UND CO2 - Serienjunkies als Klimasunder")
    * "Mail, streaming, cloud... 20 gestes pour réduire sa pollution numérique", Business Insider France, October 29, 2019
    * Radio show "Le téléphone sonne", France Inter, August 16, 2019
    * "Guide Consommation Responsable - 3 gestes pour adopter une consommation numérique responsable", Institut National de la Consommation (INC), May 29, 2019
    * "Stocker trop de photos et de mails crée aussi de la pollution", Journal de Saone et Loire, after the Festival sans Decoder of Dompierre les Ormes, May 21, 2019
    * "Pollution numérique : comment réduire ses effets au quotidien ?", TV5 Monde, January 18, 2019

9.3.2. Education

- Yves Caniou is responsible of the LPI Certification at Université Claude Bernard Lyon 1. Further discussions are in progress concerning the proposed tools and redaction of courses/questions.
- Olivier Glück was in charge of one course in DIU Enseigner l'Informatique au Lycée, 50h, Formation continue, Université Lyon 1, France.

9.3.3. Panels

- Laurent Lefèvre was invited in the following panels in 2019 :
  - The "Empreinte écologique du numérique - Ecological footprint of digital world", Festival sans Decoder, Dompierre les Ormes, May 19, 2019
  - The "Energie numérique: ennemie ou alliée de l'écologie", Ateliers Sciences et Citoyens, Les rencontres du CNRS, Poitiers, April 2, 2019

DATAMOVE Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- Commission des emplois scientifiques du centre GRA

10.3.2. Interventions

- Fête de la Science, Grenoble
- CS unplugged for schoolchildren, Inria RA

HIEPACS Project-Team

9.3. Popularization

9.3.1. Interventions

- Olivier Beaumont spoke to a class of high school students on algorithms (routing algorithms in particular) as part of the digital week organized by the BIJ (Bureau Information Jeunesse) of the City of La Teste de Buch.

KERDATA Project-Team

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

Alexandru Costan

– In charge of internships at the Computer Science Department of INSA Rennes.

– In charge of the organization of the IRISA D1 Department Seminars.

POLARIS Project-Team

10.3. Popularization

Patrick Loiseau wrote with Oana Goga an article "Publicité en Ligne : reprenons la main !", that was co-published co-published by the blog Binaire (Le Monde) and The Conversation France, June 3, 2019.

10.3.1. Internal or external Inria responsibilities

- B. Gaujal is a member of the CR2 hiring committee in Grenoble.
- J.-M. Vincent is in charge of the relation Rectorat / Inria-Grenoble for the organization of scientific events (Festival of Science, Schools Visits, organization of Conference Cycles on research in CS and Applied Mathematics for teachers in Colleges)
- J.-M. Vincent is
    - Member of the national coordination of the Diplôme Inter-Universitaire "Enseigner l'Informatique au Lycée" (50 universities involved).
    - Local Head of DIU EIL ine Academy of Grenoble
    - Member of the organization of the teaching sessions for all the teachers in CS coming from abroad
    - Member of the national Commission Inter-Irem in Informatics
    - Member of the first national jury for the competitive recruitment of teachers in computer science (Capes NSI 2019-20)

10.3.2. Articles and contents

Arnaud Legrand participated in the writing of a book [39] on Reproducible Research, which aims at helping students and engineers and researchers to find efficient and accessible ways leading them to improve their reproducible research practices.

10.3.3. Education

- V. Danjean is the head of the DU ISN formation (Diplôme Universitaire Informatique et Sciences du Numérique)
- V. Danjean co-organized the new DIU EIL formation (Diplôme Inter-Universitaire Enseigner l'Informatique au Lycée). He is involved both at the national level (for the coordination and the definition of the content of this formation provided in more than 30 universities in France), and at the local level (coordination of the local teams, courses scheduling, conference organization, ...)

10.3.4. Interventions

- V. Danjean participated in "La Fête de la Science", animating several sessions of "unplugged computer science"
- P. Loiseau co-rganized and animated a workshop "IA, éthique et société", Forum Ecobiz Grenoble, October 2019.
- P. Loiseau participated in a debate "Ethique et numérique : quels enjeux sociétaux ?". Festival Transfo, Grenoble, France, January 2019.

ROMA Project-Team (section vide)

<p style="text-align:center;color:red;font-weight:bold;font-size:1.3em;">STORM Project-Team</p>

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- Samuel Thibault : Organization of a meet-a-researcher day for ENS Lyon, December 2019

10.3.2. Interventions

- Emmanuelle Saillard, Raymond Namyst: Fête de la Science, Inria, October 2019.
- Emmanuelle Saillard: Printemps de la mixité, Inria, April 2019.
- Emmanuelle Saillard, Sabrina Duthil: Forum des métiers, Lycée des graves, April 2019.
- Emmanuelle Saillard: Moi Informaticienne - Moi Mathématicienne, University of Bordeaux, April 2019.
- Olivier Aumage, Nathalie Furmento, Emmanuelle Saillard, Adrien Cassagne: Welcoming ENS-Lyon undergraduate students, Inria, December 2019.
- Olivier Aumage, Marie-Christine Counilh, Emmanuelle Saillard, Kun He: Welcoming Schoolchildren, Inria, December 2019.

10.3.3. Creation of media or tools for science outreach

- Pierre-André Wacrenier and Raymond Namyst have developed a software platform named Easy-PAP to provide students with an easy-to-use programming environment to quickly learn parallel programming (using Pthreads, OpenMP, OpenCL and MPI). The platform has a nice graphical interface which makes it suitable for showing the benefits of High Performance Computing to a broad audience. More information on the web site: https://gforgeron.gitlab.io/easypap/

TADAAM Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

Brice GOGLIN is in charge of the diffusion of the scientific culture for the Inria Research Centre of Bordeaux. He organized several popularization activities involving colleagues.

10.3.2. Articles and contents

- Guillaume PALLEZ wrote a blog article for *Binaire* on autonomous vehicles [37].
- François PELLEGRINI was interviewed on the subject of "*Resisting algorithmic governance*" (cover page), Expertises droit/technologies/prospectives, nr 443, Feb. 2019 (https://www.expertises.info/#anciens-numeros).

10.3.3. Interventions

- Brice GOGLIN is the sponsor (*parrain*) of the *Edouard Vaillant* middle school (Bordeaux) for their scientific projects with the fondation *La main à la pâte*.
- Guillaume PALLEZ, Brice GOGLIN, Valentin HONORÉ, Philippe SWARTVAGHER and Nicolas VIDAL gave seminars and hands-on session about computer science to schools attending *Fete de la Science*, Oct. 2019.
- François PELLEGRINI participated in the round table "*GDPR and cyber-security*" during the OpenS'IAE event, Pau.
- François PELLEGRINI participated in the rountable on "*Legal aspects, GDPR and anonymization technologies*" during the annual congress of *Société informatique de France* (SIF), Bordeaux.
- François PELLEGRINI gave a conference on the security of personal data during the *Mars@Hack* event, in Mont-de-Marsan.
- François PELLEGRINI participated in the round table "*Is our legal framework IA-compatible?*" during the NAIA (*Nouvelle-Aquitaine Intelligence Artificielle*) event, Bordeaux.
- François PELLEGRINI participated in the round table "*What alternatives and what regulations in the GAFAM era?*" during the second edition of the *Rencontres Culture:Tech*, Assemblée nationale, Paris.
- François PELLEGRINI gave a conference on "*Freedom in the digital age*" to students of first and second year of all departments at ENS Cachan (250 people).
- François PELLEGRINI participated in a round table on "*The future of choice*" in the context of the "de-inauguration" of the exhibition textitUnder influence, the science of choice at Espace Pierre-Gilles de Gennes (ESPGG), Paris.
- François PELLEGRINI answered the public at the movie theater Utopia Bordeaux after the display of the movie *Meeting Snowden*.
- François PELLEGRINI gave a public conference on "*How does personal data processing interfere with our privacy?*" during the *IA Pau* conference, Pau.

10.3.4. Internal action

- François PELLEGRINI participated in a round table on "*Digital security: technical, ethical and legal aspects*", Inria scientific days 2019, Lyon (https://project.inria.fr/journeesscientifiques2019/).

10.3.5. Creation of media or tools for science outreach

- Brice GOGLIN was involved in the building of the MOOC *Sciences Numériques et Technologie* which focus at bringing basics about computer science to high-school teachers and general audience. More than 18 000 people registered to the course.
- François PELLEGRINI is one of the 14 people appearing in the documentary "*LOL: Logiciel libre, une affaire sérieuse*" ("LOL: Free software, a serious matter").

DIVERSE Project-Team

9.3. Popularization

9.3.1. Interventions

- STAMP - Orange Test and Dev Day, Grenoble, France - Nov 2019
- STAMP - Eastern Paris Dev Meetup, Lunatech, Chessy, France - Jul 2019
- STAMP Breakout Session & Talks - OW2con'19, Orange Gardens, Paris Châtillon - Jun 2019
- STAMP Workshop for EC-DGIT (European Commission DGIT) - Brussels - May 2019
- STAMP - Devoxx Paris - Apr 2019
- STAMP & CI testing automation - BreizhCamp 2019 - Mar 2019
- STAMP Talk and Workshop - Station-F, Paris - Feb 2019
- Tech talk at Alten - Rennes - Dec 2019
- Tech talk at Harmonic - Cesson-Sévigné - Oct 2019
- Tech talk at Veonum - Rennes - Sep 2019
- Tech talk at Nokia - Rennes - Jun 2019
- Tech talk at OrangeLabs : Hands-on Workshop - Cesson-Sévigné - May 2019
- Tech talk at Solocal and Kereval - Rennes - Mar 2019
- Tech talk at FaberNovel - Test amplification - Mar 2019
- Sciences de l'Ingénieur au féminin - Lycée Sévigné, Cesson-Sévigné - Nov 2019
- *J'peux pas j'ai informatique* - Inria, Rennes - Apr 2019
- *Petit-déjeuenr des métiers* - Lycée Sévigné, Cesson-Sévigné - Mar 2019 (je ne suis pas sure de la date)
- Devoxx 2019 - Les APIs hypermedia expliquées simplement (17-19 avril 2019) ("While web pages are full of hyperlinks and hypermedia, web APIs are not. However, augmenting web APIs with links is at the core of the REST architectural style, but only 5% of APIs actually do it. That's right, only 5%, despite most people saying that they provide RESTful APIs. In this talk, we discuss what an hypermedia-powered API looks like, what problems of distributed systems integration and composition it can solve and what it would change in frontend code to have such APIs.
- Embedded Linux conference Europe [54] – Given a configuration, can humans know in advance the size, the compilation time, or the boot time of a Linux kernel? Owing to the huge complexity of Linux (there are more than 15000 options with hard constraints and subtle interactions), machines should rather assist contributors and integrators in mastering the configuration space of the kernel. In this talk, we introduce TuxML an OSS tool based on Docker/Python to massively gather data about thousands of kernel configurations. Mathieu will describe how 200K+ configurations have been automatically built and how machine learning can exploit this information to predict properties of unseen Linux configurations, with different use cases (identification of influential/buggy options, finding of small kernels, etc.) The vision is that a continuous understanding of the configuration space is undoubtedly beneficial for the Linux community, yet several technical challenges remain in terms of infrastructure and automation.
- API Days - Backend is the new frontend (9-11 décembre 2019)

EASE Project-Team (section vide)

FOCUS Project-Team

10.3. Popularization

Michael Lodi and Simone Martini have carried out extended work of scientific popularization, including the following.

- They are members of the technical committee of Olimpiadi del Problem Solving (at Italian Ministry of Education), http://www.olimpiadiproblemsolving.com; this involves preparation of material and supervision and jury during the finals.

- Simone Martini has given the following talks, among others:
    – De la création d'une "théorie mathématique du calcul" à la "pensée informatique". Quatrième journée académique sur l'enseignement de l'informatique, Marseille (avril 2019)
    – To code or not to code: the school curriculum facing the digital revolution. Collegium—Lyon Institute for Advanced Studies (Juin 2019)
    – Logic and computing in Italy at the birth of the Italian Computer Science, Roma Tre, September 2019

INDES Project-Team

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

Tamara Rezk was member of the editorial board of Interstices (https://interstices.info/) and Blog Binaire Le Monde (https://www.lemonde.fr/blog/binaire/).

9.3.2. Articles and contents

- Nataliia Bielova has been interviewed by the Usine Digitale on 22 November 2019, title "Fuite massive de données à AccorHotels : ce que risque l'entreprise", https://www.usine-digitale.fr/article/fuite-massive-de-donnees-a-accorhotels-que-risque-l-entreprise.N906279.
- Nataliia Bielova has been interviewed by the L'OBS on 29 November 2019, title "Entre réalité augmentée et reconnaissance faciale, on a parcouru le supermarché de demain", https://www.nouvelobs.com/economie/20191129.OBS21725/entre-realite-augmentee-et-reconnaissance-faciale-on-a-parcouru-le-supermarche-de-demain.html.
- Nataliia Bielova and Tamara Rezk have contributed to the Inria white book on CyberSecurity, published in January 2019: https://hal.inria.fr/hal-01993308.
- The browser extension "Cookie Glasses" developed by Celestin Matte and Nataliia Bielova has been extensively discussed on the general public media due to a complaint made by NOYB to the CNIL on the GDPR and ePrivacy violations of several e-commerce websites: https://noyb.eu/say-no-to-cookies-yet-see-your-privacy-crumble/.

9.3.3. Education

- Nataliia Bielova: *Moderation and Animation of the MOOC Protection de la vie privée dans le monde numérique*, 05/2019-06/2019.

9.3.4. Interventions

- Nataliia Bielova made an intervention with high school students during Semaine De La Science with Cinesciences at the cinémathèque of Nice on 4 October 2019.
- Celestin Matte presented his work on "Tracage Wifi et Bluetooth" at the public event called "Pas Sage en Seine" in June 2019, https://programme.passageenseine.fr/.
- Nataliia Bielova made a presentation with BSc and MSc students during the ACM-W Ukrainian Chapter celebration on December 5, 2019, https://women.acm.org/2019-2020-celebrations/.
- Imane Fouad presented her work on "detection of third-party trackers" at Inria PhD Seminars in December 2019.

RMOD Project-Team

10.3. Popularization

10.3.1. Articles and contents

- Olivier Auverlot, Stéphane Ducasse, Luc Fabresse. *TinyBlog: Créer votre première application web avec Pharo* [15].
- Olivier Auverlot, Stéphane Ducasse, Luc Fabresse. *TinyBlog: Develop your First Web App with Pharo* [16].
- Stéphane Ducasse. *Pharo with Style* [17].

10.3.2. Education

- A MOOC for Pharo is online (Stéphane Ducasse).
  http://mooc.pharo.org
- The Pharo Consortium was part of GSOC (Google Summer of Code) again in 2019. Oleksandr Zaitsev was co-organizer. RMoD mentored some of the Students.

10.3.3. Interventions

- Multiple public Pharo Sprints in Lille.
  https://association.pharo.org/events
- RMOD co-organized and participated at ESUG 2019.
  http://www.esug.org/wiki/pier/Conferences/2019

10.3.4. Internal action

- 30 Minutes de Sciences, Inria Lille - Nord Europe. 25 octobre 2019: *Hard bugs and how to track them with Unanticipated Debugging*, Steven Costiou.

AGORA Project-Team

10.3. Popularization

- Hervé Rivano, Atelier de recherche participative sur la mesure de la qualité de l'air, Ecole Urbaine de Lyon, France.

- Hervé Rivano, Développement et expérimentation du kit pédagogique *Ca va chauffer*, Ecole Jules Guesde, Villeurbanne, France.

- Hervé Rivano, Aterlier autour du kit pédagogique *Ca va chauffer*, Super Demain, Métropole de Lyon.

10.3.1. Articles and contents

- Hervé Rivano is co-author of the blog post *Représenter l'intangible : les défis de la visualisation des données numériques environnementales. Montrer la pollution de l'air, le cas d'Air To Go*https://medium.com/anthropocene2050/

- Hervé Rivano is organizer and moderator of the podcast *Quelle ville intelligente est possible ?*, https://www.sondekla.com/user/event/10011

- Hervé Rivano is moderator of the podcast *Anthropocène et outils numériques*, https://www.sondekla.com/user/event/9805

10.3.2. Interventions

- Walid Bechkit was invited speaker about *3M'Air Mesures citoyennes Mobiles et Modélisation: qualité de l'air et îlots de chaleur à Lyon*, Colloque National Capteurs et Sciences Participatives, Paris, 2019.

- Oana Iova, Hervé Rivano and Fabrice Valois was involved in *Les rêveries lumineuses de Léonard*, https://popsciences.universite-lyon.fr/agenda/les-reveries-lumineuses-de-leonard-fete-des-lumieres-2019/, contribution de l'Ecole Urbaine de Lyon pour l'Université de Lyon, Fête des Lumières, 2019.

COATI Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- Jean-Claude Bermond, Frédéric Havet, Joanna Moulierac, and Nicolas Nisse are involved in Terra Numerica which brings together several popularization groups in order to create a museum of digital sciences.
- Frédéric Havet: Vice-president and member of the scientific committee of the association Institut Esope 21 (https://lewebpedagogique.com/institutesope21/).

10.3.2. Education

- Frédéric Havet, Joanna Moulierac and Nicolas Nisse (responsable) : Participation to Galejade project "Graphes et ALgorithmes : Ensemble de Jeux À Destination des Ecoliers... (mais pas que)" https://galejade.inria.fr/.

    Design of pedagogical resources introducing graphs and algorithms to primary school students.

    Training of primary school teachers, ESPE, Nice (March 22, 2019), Lyon (April 10th, 2019).

    Intervention Lycée Carnot (Cannes, March 14, 2019), Lycée Sydney Bechet (Antibes, March 13, 2019), Lycée au Cannet (April 5, 2019)

- Frédéric Havet :

    Training of secondary school teachers on graphs and algorithms. April 23, 2019.

10.3.3. Interventions

- Fête de la Science (Frédéric Havet, Nicolas Nisse, Ali Al Zoobi) :

    Villeneuve-Loubet, October 5, 2019;

    Colline du Château de Nice (stands Inria and I3S laboratory), October 4-6, 2019;

    Collège Lycée Vinon-sur-Verdon, October 8-11, 2019;

    Palais des Congrès de Juan-Les-Pins, October 19-20, 2019.

- Ali Al Zoobi :

    Presentation of posters and combinatorial games during the "Fête des Sciences", Collège Emile Roux, June 5, 2019.

- David Coudert :

    Presentation of the *Flinders Hamiltonian Cycle Problem Challenge* to a group of students from classe préparatoire MPSI, Lycée International de Valbonne, June 24, 2019.

- Frédéric Giroire :

    Accueil de la mission locale de Grasse pour une session de médiation scientifique, 26 avril 2019.

- Frédéric Havet :

    Animation of the exhibition "Animals of the Mediterranean sea" 6 classes, Ecole la Tauriac, Toulon, January 24, 2019.

    Conferences "Birds of Var", 6 classes, Ecole élémentaire de Rians, February 1, 2019.

    Conference "Be a mathemagician", Ecole des Pallières, February 2, 2019.

    Animation "Birds of Var", 6 classes Ecole de la Tauriac and 2 classes Ecole de la Beaucaire, Toulon, Mars 07 2019.

3 conferences "Les pavages", "La science du ballon de football", "Mathémagie" for 10 classes in total. Collège Daudet Nice, April 15, 2019.

"La magie du binaire". Conference for six classes in Manosque for the "Jeux fabriqués" day organised by DANE 04. April 2, 2019.

Training of primary school teachers.

- Frédéric Havet, Joanna Moulierac, and Nicolas Nisse participated to the supervision of twelve schoolchildren (3ème) in internship.

- Nicolas Nisse :

    MathC2+, Sophia Antipolis, June 14, 2019

- Michel Syska :

    Member of the organization of the code competition "*Retro Gaming pico-8*" (55 teams of 3 students), April, 2019.

    Organization and supervision of the local site IUT for the national code competition "*La nuit de l'info*" (156 students = 3.7% of participants), December 5-6, 2019.

10.3.4. Internal action

- Frédéric Havet and Nicolas Nisse participated to the Cafe'In presenting Galejade. April 29, 2019.

DANTE Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

Isabelle Guérin Lassous has been the managing director of the Foundation Blaise Pascal until the end of June 2019. The objectives of the foundation are to promote mathematics and computer science and to attract young people to scientific fields like computer science and mathematics. The actions of the FBP focus on:

- a support to actors that promote mathematics and computer science via allocated funding based on call of proposals;
- a structuring of actors to increase the impacts of their actions, to coordinate the efforts and to share experiences;
- a development of innovative experiences via summer camps and clubs of mathematics and computer science.

10.3.2. Interventions

Isabelle Guérin Lassous participated to the project Science XX Elles organized by the association Femmes & Sciences, CNRS and Ecole Normale Supérieure de Lyon. A portrait has been realized and has been exhibited in from of the Musée des Confluences during La Fête de la Science in October 2019 (http://www.femmesetsciences.fr/lascience-taillexxelles/lyon/isabelle-guerin-lassous/. She also participated to a speed meeting with families visiting the Musée des Confluences during which she has promoting her research activity.

Isabelle Guérin Lassous spent one day in high school (lycée St Just in Lyon) to promote computer science and to present female computer scientists in from of terminal classes.

Isabelle Guérin Lassous participated to the Challenge Innovatech organized by the association Elles Bougent. She was a member of the selection committe who selected a scientific project designed by a group of young girls (in high school).

DIANA Project-Team

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

Damien Saucez is part of the MASTIC (https://project.inria.fr/mastic) group at Inria. MASTIC groups all the activities for scientific dissemination for Inria Sophia Antipolis.

9.3.2. Articles and contents

Walid Dabbous wrote an Interstices article [37] on the occasion of the 50th anniversary of the Internet. The article recalls the story of the first France-ARPAnet connection that was established by Christian Huitema's team in July 1988.

DIONYSOS Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

Yann Busnel is member of Development Council of Computer Sciences Master at Université de Nantes (2017–*).

10.3.2. Interventions

G. Rubino makes regular presentations to high school students about the research work in general, and specific technical topics in particular. Current talks:

- Randomness as a tool
- Internet as a research problem
- Great challenges in maths: the Riemann Hypothesis
- Great challenges in math/computer science: the "P versus NP" problem

DYOGENE Project-Team (section vide)

EVA Project-Team

10.3. Popularization

10.3.1. Dans les Medias

- **Thomas Watteyne**
    - Falco : Des capteurs pour connecter ports et plaisanciers. BoatIndustry, 15 November 2019
    - Agde : le port connecté, une réalité. Midi Libre, 31 October 2019.
    - Gestion portuaire : les ports de Lorient et Cap d'Agde entrent dans l'ère du port connecté, Actu Maritime, 1 August 2019.
    - Port connecté : un nouveau cap franchi grâce à Falco (an interview of our startup's CEO Elsa Nicol), inria.fr, 18 February 2019.

10.3.2. Creation of media or tools for science outreach

A video concerning the research on protocols for VANETs by Mohamed Hadded has been made by Inria.

FUN Project-Team

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

- Nathalie Mitton is the referent researcher for the creation of the MATH Laboratory in Nord

9.3.2. Articles and contents

- Nathalie Mitton published a paper in Techniques de l'Ingénieur.
- Valeria Loscri released an interview "Innovation Valeria Loscri, la lumière des LED contre le wifi électromagnétique" for the newspaper La Voix du Nord

GANG Project-Team (section vide)

GANG Project-Team (section vide)

MARACAS Team (section vide)

NEO Project-Team

10.3. Popularization

10.3.1. Interventions

- Sara Alouf presented the Researcher profession at the *Forum des Métiers*, Collège Emile Roux, Le Cannet, on 15 March 2019, to a total of 62 students in 6 groups, aging 12-14 years.

RESIST Team

10.3. Popularization

10.3.1. Articles and contents

Abdelkader Lahmadi and Frédéric Beck provided a podcast about the security of connected devices available at Interstices (https://interstices.info/des-outils-pour-evaluer-la-securite-des-objets-connectes/)

Thibault Cholez gave an interview for the *factuel* (newsletter of the University of Lorraine) to present the H2020 project CONCORDIA (https://factuel.univ-lorraine.fr/node/11394). He also wrote a blog entry entitled "Assessing blockchains' network infrastructure: why it matters for cybersecurity" for the CONCORDIA website (https://www.concordia-h2020.eu/blog-post/assessing-blockchains-network-infrastructure-why-it-matters-for-cybersecurity/).

Isabelle Chrisment contributed to the ARCEP Report entitled "The State of the Internet in France", June 2019, page 19, https://www.arcep.fr/uploads/tx_gspublication/rapport-etat-internet-2019-270619.pdf (French version) or https://en.arcep.fr/uploads/tx_gspublication/report-state-internet-2019-eng-270619.pdf (English version).

Jérôme François has been interviewed by France 3 Lorraine to present how cyberthreat can be predicted in the context of ThreatPredict (section 9.4.3.1). He also gave an introduction to network security in the context of FAN (https://fan.inria.fr/)

10.3.2. Education

Isabelle Chrisment participated in the SNT (Sciences Numériques et Technologie) MOOC, more especially in the design of a video entitled "Internet IP, a universal protocol?" in the module "Internet and Networks. The SNT MOOC is a FUN Project dedicated to the teachers in high schools to help them within the context of the high school reform.

10.3.3. Internal action

Jérôme François presented ThreatPredict (section 9.4.3.1) at the "Café des Sciences" in Inria Rocquencourt Center.

SOCRATE Project-Team

8.3. Popularization

8.3.1. Education

Florent de Dinechin gave a lecture in Grenoble for high-school teachers, in the framework of the ISN convention between Académie de Grenoble and Inria.

TRIBE Project-Team

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

1. **Aline C. Viana** was the President of the Scientific Commission at Inria Saclay, responsible for the selection of candidates for the CORDI-S, Post-Doc and Delegation campaigns.

2. **Aline C. Viana** is the coordinator of the ANR MITIK project to start Feb 2020 and was the international coordinator of the EMBRACE associated team of Inria.

3. Together with the members of the team, **Aline C. Viana** has submitted the short proposal of the new team as well as has presented it at the BCEP and CEP, for validation. TRiBE was officially created in Jun 2019.

4. **Aline C. Viana** is a member of BCEP, evaluating Inria teams in process of creation, discussing main issues related to different scientific commissions, discussing changes in the institution.

5. **Aline C. Viana** is co-Coordinator of the mentoring program for researchers at Inria Saclay (https://project.inria.fr/mentoratscl/). The program goal is the coach of junior researchers by more experienced ones in order to provide them with a complementary perspective for their career, independently of any hierarchical link.