



RESEARCH CENTER  
Nancy - Grand Est

FIELD

## Activity Report 2017

# Section Popularization

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## CAMUS Team

### 10.3. Popularization

A. Charguéraud is one of the three organizers of the *Concours Castor informatique*<http://castor-informatique.fr/>. The purpose of the Concours Castor is to introduce pupils (from *CM1* to *Terminale*) to computer sciences. More than 500,000 teenagers played with the interactive exercises in November 2017.

Jens Gustedt is blogging about efficient programming, in particular about the [C programming language](#). He also is an active member of the [stackoverflow community](#) a technical Q&A site for programming and related subjects.

Cédric Bastoul prepared activities and participated to *Fête de la Science* at University of Strasbourg in October 2017.

## CARAMBA Project-Team

### 10.3. Popularization

- Pierrick Gaudry organized and participated in a debate fed by excerpts from movies on the topic of cryptography and privacy in March 2017. He also gave a podcast interview about electronic voting for Interstices [15].
- Pierre-Jean Spaenlehauer did a short presentation of asymmetric cryptography to middle school students who were award winners of the Alkindi competition.
- Paul Zimmermann co-animated a “Math-en-Jeans” atelier with lycée Vauban in Luxembourg city (Luxembourg).

## CARTE Team

### 10.3. Popularization

- Nazim Fatès contributed to a booklet on the theme "Mathématiques et langages" edited by the Commission française pour l'enseignement des mathématiques (CFEM) for the forum "Mathématiques vivantes" (see <http://forum-maths-vivantes.fr/-Panorama>).
- This text appeared in a revised version on the CNRS website "images des mathématiques" [27].
- Nazim Fatès participated to a meeting ("projection-debat") at the Réseau et transport de l'électricité (RTE) at Villers-lès-Nancy on the these "Visages de la robotique", organised by "Sciences en lumière" (formerly Festival du film de chercheur).
- Nazim Fatès participated to a workshop on ethics in the "Forum des Sciences cognitives" organised by the "UFR mathématiques et informatique".
- Simon Perdrix gave an invited talk on quantum algorithms at the event "Mathématiques en mouvement sur l'Ordinateur quantique" organised by the Fondation Sciences Mathématiques de Paris at IHP.

**GAMBLE Project-Team****10.3. Popularization**

L. Dupont participated to several days of popularization of computerscience: Open Bidouille Camp March, 26th 2017, popularization of programming, general audience ; ISN day March, 30th 2017, popularization of computerscience for high-school teachers ; Fête de la Science 14th October 2017 Inria event, general audience, and Google Day in Nancy 21st October 2017, general audience.

## **PESTO Project-Team**

### **10.3. Popularization**

- How to Explain Modern Security Concepts to your Children [11] (J. Dreier)
- Vote par Internet [41] (V. Cortier and S. Kremer)
- 2 days of debate on privacy at *Moments d'invention 2016*, organized by Grand Nancy (V. Cortier)
- booth at the *Open Government Summit* organized at Sénat (V. Cortier)
- Conference and debate at the *ISN day*, conference for teachers in computer science (V. Cortier)
- Interview for *silicon.fr* on weakening cryptosystems to allow limited access by authorities (S. Kremer)
- France 3 Lorraine radio interview on computer security (S. Kremer)
- Interview for *AFP* on electronic voting (S. Kremer)
- Interview for *AFP* and *Huffington Post* on electronic voting (V. Cortier)

**VERIDIS Project-Team (section vide)**

**SPHINX Project-Team (section vide)**

**TOSCA Project-Team (section vide)**

**BIGS Project-Team (section vide)**

**CAPSID Project-Team****9.3. Popularization**

The team presented its activities during the Inria Nancy – Grand Est centre’s Open Day for the “Fête de la Science 2017” (14 Oct 2017).

**MIMESIS Team****10.3. Popularization**

Demonstration at *50 Years Inria* on Nov 10 in Paris, attended by Mr. Mounir Mahjoubi, secrétaire d'état auprès du premier ministre, chargé du numérique.

## **NEUROSYS Project-Team**

### **9.3. Popularization**

Talk during the National Brain Awareness Week: Brain-Robot interactions, Mar. 14th, 2017, middle school Ernest Bichat, Lunéville (L. Bougrain)

Expert for the MGEN (a French mutual benefit insurance company)'s day about "réparer les vivants", Mar. 15th, 2017, Maisons-Alfort (L. Bougrain)

Scientific education on Information Technology with Marie Duflot-Kremer in the Marcel Leroy elementary school (20-22 students per class: CM2, CE2 / CM1, CE1 / CE2), 3h (three times 1h), May 30th 2017 (Tamara Tošić)

Exhibit of the Grasp-IT system to improve motor activity at the Interactions Homme-Machine conference 2017, August 2017, Poitier (Sébastien Rimbert)

Exhibit of the Grasp-IT system to improve motor activity at Inria-Industry Meeting on data and their applications, October 18th 2017, Paris (L. Bougrain & Sébastien Rimbert)

**TONUS Team (section vide)**

## **COAST Project-Team**

### **8.3. Popularization**

- In June 2017 Claudia-Lavinia Ignat organised the meeting Research@Inria at Inria Nancy-Grand Est for presenting to internship students, PhD students and postdocs various Inria programs and the main research topics at Inria with a focus on activities of research teams at Inria Nancy-Grand Est. She also presented the main activities of a researcher and briefly described her research work.

## MADYNES Team

### 10.3. Popularization

- Isabelle Chrisment was in charge of the scientific part of the 4th module (connecter le réseau) in the Class'Code project <https://project.inria.fr/classcode/classcode-in-english/>, aiming at helping teachers and educators for introducing computer science to children aged from 8 to 14 years;

## **ALICE Project-Team**

### **10.3. Popularization**

Haichuan Song, Sylvain Lefebvre and Salim Perchy presented IceSL at a booth at the Maker Faire Rome 2017 (<http://www.makerfairerome.eu/en/>). This is a major event with 100K+ visitors every year. We presented the software to students, general public and 3D printing enthusiasts. We received a Maker of Merit award for our project.

Sylvain Lefebvre participated to the radio program "La méthode scientifique" on France Culture, aired on November 8 2017 (<https://www.franceculture.fr/emissions/la-methode-scientifique/la-methode-scientifique-mercredi-8-novembre-2017>).

B. Lévy gave an invited talk at "Forum Art Inovation" organized by IRCAM, Paris, Pompidou center (16-03-2017): [http://medias.ircam.fr/stream/ext/video/files/2017/04/04/Vertigo\\_16mars2017\\_%20BrunoLevy\\_GB.mov.webm](http://medias.ircam.fr/stream/ext/video/files/2017/04/04/Vertigo_16mars2017_%20BrunoLevy_GB.mov.webm).

## LARSEN Project-Team

### 10.3. Popularization

One of the main general audience event of the team has been the “Fête de la Science” on the 13th and 14th of October, 2017. The team hosted about 10 groups of 15-20 persons (150 to 200 visitors) over two days, with the following demonstrations:

- “smart apartment”, with the “smart tiles” and the Pepper Robot;
- AnDy project: activity recognition with the “inertial” motion capture suit, muscle sensing with EMG sensors;
- iCub robot: performing squats with the iCub robot and a whole-body motion controller; interactive demonstrations of iCub following a red-ball (given to a child) with the gaze and the head;
- ResiBots project: damage recovery with a damaged 6-legged robot.

The team also presented numerous videos of additional results with the robots. Involved members of the team: François Charpillet, Konstantinos Chatzilygeroudis, Brice Clément, Francis Colas, Oriane Dermy, Dorian Goepp, Waldez Gomes, Aurore Husson, Serena Ivaldi, Yassine El Khadiri, and Adrian Bourgaud, Adrien Malaisé, Jean-Baptiste Mouret, Kazu Otani and Olivier Rochel.

In addition:

- Vincent Thomas gave tutorials on “physics simulation” and “stochastic decision making” for teachers during “journées ISN-EPI” (30th of Mars 2017).
- Vincent Thomas participated in the preparation and reviewing of “Computer Science Exporoute” (conducted by Inria Nancy Grand-Est) presented in 2017.
- Vincent Thomas animated discussions and tutorials on “planning in mazes” for students from 6 to 20 years old during “fêtes de la sciences” organized by Univ. Lorraine (13th of October 2017).
- Vincent Thomas presented “Bayesian reasoning” during “journées portes ouvertes” organized by Inria Nancy-Grand Est (14th of October 2017).
- Vincent Thomas accompanied computer science DUT students during the “Nancy accueille Google” event (20th of October 2017).
- Serena Ivaldi was panelist in public conferences/debates in Futur en Seine and 50 ans of Inria, both in Paris.
- Amine Boumaza is a member of the editorial board of “Interstice”.
- Karim Bouyarmane was the academic advisor for the Polytech School of Engineering students team of robotics that participated to the 2017 Coupe de France de Robotique.
- Francis Colas participated in a Sciences en Lumières event “Visages de la robotique” at RTE (14th of December 2017).

## MAGRIT Project-Team

### 10.3. Popularization

Members of the team participate on a regular basis, to scientific awareness and mediation actions.

- Erwan Kerrien is Chargé de Mission for scientific mediation at Inria Nancy-Grand Est. As such, he is a member of the steering committee of “Maison pour la Science de Lorraine, and member of the IREM<sup>0</sup> steering council. He also serves as the academic referent of an IREM working group aiming at introducing computer science in middle and high school curricula. Among other activites, he was also an associate researcher to a MATh.en.JEANS workshop, and he participated in the creation of a MOOC for teachers of the new ICN option (Informatique et Création Numérique - *Computer Science and Digital Creation*) at the beginning of high school curriculum.
- Gilles Simon participated to the “Fête de la science 2017” at the Faculté de Sciences et Technologies of the Université de Lorraine. He presented unplugged activities of computer science.
- Pierre-Frédéric Villard participated to open days and science festival in the IUT of Saint-Dié des Vosges. He presented augmented and virtual reality demos and their link to the high school mathematics program.

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<sup>0</sup>Institut de Recherche sur l’Enseignement des Mathématiques - *Research Institute for Teaching Mathematics*

## MULTISPEECH Project-Team

### 10.3. Popularization

Interview for “Quand les machines apprennent à parler l’humain — Le Zoom de la Rédaction”, *France Inter*, February 2, 2017 (E. Vincent)

Interview for “Les prochains défis de la reconnaissance vocale”, *Le Figaro*, April 11, 2017 (E. Vincent)

Interview for “2017 : Alexa, la voix d’Amazon”, *Les Échos*, August 31, 2017 (E. Vincent)

Interactions vocales, Grand-Est Numérique, September 2017 (R. Serizel)

Demonstrations at Fête de la Science, University of Lorraine, October 13, 2017 (G. Carbajal, L. Perotin, R. Serizel, E. Vincent)

Demonstrations at the Rencontre Inria Industrie “Les données et leurs applications”, October 18, 2017 (E. Vincent)

Interview for “Les assistants vocaux vont bousculer la radio”, *Le Monde*, October 19, 2017 (E. Vincent)

Interview for *France Culture*, November 2017 (E. Vincent)

Talk at “Fresh from the Labs”, Station F, Paris (France), November 30, 2017 (E. Vincent)

Demonstration at Journée des métiers, Collège Péguy, le Chesnay, March 2017 (A. Piquard-Kipffer).

Demonstration of Dynalips at “50 ans Inria”, Paris, November, 7-8, 2017 (S. Ouni)

**ORPAILLEUR Project-Team (section vide)**

## **SEMAGRAMME Project-Team**

### **8.3. Popularization**

- Maxime Ambard:
  - Vice head of the editorial board of [interstices](#) ), a French magazine popularizing computer sciences.
  - Several publication about algorithms, AI and NLP for [interstices](#) ).
  - Winner of a [Blaise Pascal Foundation](#) grant for a project to create a happy families game (*jeu des sept familles*) based on computer science sub-fields and scientists.
- Bruno Guillaume: interviewed by the large audience scientific newspaper [Sciences & Avenir](#) (January 2017) for the article *Pour aidez la recherche, jouez !*