IRIXYS Research and Innovation Center – December 2017

Table des matières

Latest Success Stories

The creation of the IRIXYS Center has demonstrated a definitely positive effect on our proposal submissions these last 6 months. We indeed obtained:

- French ANR LabCom (joint lab) with AttestationLégale, a French (Lyon) SME: 300 k€. Note : we expect an important leverage effect from this cooperation (industrial PhD grants, industry-academy funded projects (ex: FUI, PIA)

- UFA-DFH (French-German University)/French Ministry of Higher Education and Research PhD-D grant: 100 k€

- Industrial PhD grant ("CIFRE"): 200 k€ (incl. salary + 75 k€ of support for IRIXYS)

- ANR-DFG research project: 530 k€

Note: proposal submissions under preparation or review: see below.

We also organized, with the support of the French-German University (UFA-DFH), the French-Bavarian Center for Academic Cooperation (CCUFB-BFHZ) and the ATOS and Worldline companies, an **international academia/industry summer school on the topic "Big data and Business: methods, technologies and innovation"** from July 16th to July 21st at Chiemsee (Bavaria, Germany) : www.irixys.org/EVENTS. This summer school was a success with more than 50 participants (we had to refuse some registrations) coming from the academy and the industry.

More recently, in December we jointly organized, with other colleagues from LIRIS, a **workshop on cybersecurity** held in the framework of our Partner University Fund (USA-France) project (Université de Lyon, University of Arizona; coordination: M.-S. Hacid, LIRIS)

Furthermore:

- V. Barellon (PhD student INSA Lyon) was awarded the "Best Student Paper Award" at ACM DocEng'2017 Conference (world leading conference in document engineering)
- L. Laporte (assistant professor, INSA Lyon) was awarded the "Best Reviewer Award" at ACM SIGIR 2017 (world leading conference in information retrieval)
- S. Bouchenak joined the Scientific Committee of the industrial cluster Minalogic
- S Bouchenak and X. Urbain joined the Scientific Council of the Lyon Federation of Computer Science Labs (Fédération d'Informatique de Lyon)

First Meeting of the External Advisory Board (Lyon, March 2018)

We plan to organize **the first meeting of the IRIXYS External Advisory Board in Lyon in March 2018**. The composition of the Board is almost finalized. It will gather representatives from industry, academy, and regional authorities.

2018 as a Celebration and Prospective Year

In June 2018, in Gargnano (Garda Lake, Italy), will be organized the **20th edition of the IRIXYS workshop.** As decided in June 2016, we would like to leverage this celebration to strengthen IRIXYS visibility through two major events :

- An **Alumni for Innovation Day**: gathering all IRIXYS alumni, this day is aimed at leveraging the unique network of our alumni. It will target three main goals: cohesiveness of IRIXYS teams, actual students and former students; high level talks on the hot topics and innovation issues as they are seen by our alumni in their respective positions and companies; finally, the establishment of partnerships with some of these latter
- The first organization of the **"IRIXYS Gargnano Talks"**: this event is aimed at gathering high level executives in IT, politics, and research. Our mid-term objective is to create a series of annual meetings on "IT Innovation for the Digital Society" (title to be drafted and fixed). We of course do not expect that 2018 first edition will be highly visible from the US and China! Our goal is to start this new annual rendezvous, to evaluate what we can achieve in the mid-term and to make these talks grow in the next years. This event should not be only an IRIXYS event: we indeed would like it to be supported and recognized by all our stakeholders, including of course our three universities

In December 2018, our **winter workshop** will be held in **Passau**… exactly ten years after the first workshop already organized there. Of course, we plan to use this anniversary to promote the results achieved by IRIXYS and to present its agenda for the next 10 years!

Note: we may organize some event in Lyon to celebrate these 10 years of collaboration but the format and the schedule of such event are not yet decided.

Finally, in June 2018, we will co-organized in Paris, in collaboration with the ATOS Company, an **industrial-academic workshop on the topic: "Transfer Learning: Techniques and Innovation for Business"**.

Roadmap for the Establishment of a Center of excellence "ICT for Energy and Environment" in Partnership with Université de Pau et des Pays de l'Adour (UPPA) / LIUPPA-Spyder Research Team

We have been in touch with the LIUPPA-Spider team (Pau and Pays de l'Adour University – Anglet premises (South-West of France)) for more than one year. This research team indeed has showed an important interest in establishing a partnership with IRIXYS.

This was the opportunity to discuss among us and formalize the expectations and content of partnerships with external universities. Indeed, as it is stated in the agreement that established IRIXYS, IRIXYS should aim at creating long-term relationships with both research and industrial partners. Through the LabCom instrument, funded by the French research agency ANR, we recently created a joint lab with AttestationLégale (see above) with the objective of crafting a long-term and structuring collaboration. However, no similar instrument is available and adaptive enough for academic partnership.

We consider that a partnership is pertinent only if it enables to leverage the strengths of the partners and to create added value for all of them. In the special case of LIUPPA / Spyder :

- UPPA has recently been distinguished by the French Ministry of Higher Education and Research through the label of excellence I-SITE with a focus on "Energy and Environments Solutions (E2S)". It is a remarkable achievement based on the consideration of the very strong regional scientific and industrial ecosystem in these domains. An important financial support has been granted to UPPA I-SITE E2S

- The UPPA Spyder team has acquired a strong experience and skills in the topics of semantics, smart sensing, and industrial systems. These competences complement those of IRIXYS teams

- IRIXYS proposes a unique international network and multiple collaboration tools which allow establishing long-term and rich partnerships. IRIXYS teams are recognized in the domains of

cognitive computing, cybersecurity/privacy protection, and distributed systems which are at the core of the integration of ICT technologies into energy and environment solutions

We therefore propose to develop a partnership around **the establishment of a Center of excellence "ICT for Energy and Environment"** organizing a comprehensive and coherent set of actions, in strong connection with and partly supported by the I-SITE E2S:

- A Scientific E2S Chair
- Joint Research Programs (in response to national and international calls for proposals)
- Industrial Transfer Actions
- Training Programs
- An Expertise Center
- A Joint Lab (prospective partner: Bertin Technologies, a French company specialized in energy)
- A Showroom
- A Hardware Platform (incl. servers, storage facilities, sensors, …)
- Communication and Dissemination Actions (workshops, conferences, summer school, hackathons

Main Actions and Proposal Submissions under Preparation or Review

- Renewal of IRIXYS PhD-Track program (UFA-DFH): under review. Notes :

  + according to UFA-DFH extensive evaluation, almost 90% of the students who have followed the PhD-Track would recommend it (i.e., consider that it has added value with respect to classical INSA/Passau curricula)

  + we targeted a group of 6 students per year starting the double engineer/master program. Considering the high demand from the students, this number has been regularly exceeded (e.g., 10 students this year)

- EU European Industrial Doctorate (topic : cognitive computing for fraud detection): to be submitted in January 2018

- French industry-research project (FUI) (topic : blockchain for accounting): to be submitted in January-February 2018

- Industry-academy workshop on the topic "Transfer Learning: Techniques and Innovation for Business" (in collaboration with ATOS) : June 2018

- 20th IRIXYS/MDPS biannual workshop – Alumni for Innovation Day – Gargnano Talks : June 2018

- Members of the team participate in the organization of the World Wide Web Conference (Lyon, April 2018), the world leading conference on the Web

- ASF/GDR RSD winter school : March 2018, Le Pleynet - Les 7 Laux, France