M1 MoSIG 2023-2024

Research projects

September 28, 2023

Outline & Agenda

• This presentation

- Important dates
- Procedures
- Labs in the Grenoble area
- Database/list of internship offers

Research project – Important dates

"Research methodology" training

- December 12 December 15, 2023
- Research project
 - Part time period: January 29 April 19, 2024
 - One day per week (two half-days)
 - Full time period: May 14 June 7, 2024

• Defenses

- June 10 June 14, 2024
- The project may be continued during the summer (~ 1-2 extra months). Or you may also do another internship (completely unrelated to the research project).
- Note that:
 - This summer part is completely optional.
 - This part will not be evaluated in the context of M1 MoSIG.
 - This part requires extra administrative procedures.

Procedures

Once you have been accepted for an internship by a researcher/advisor:

- First, contact the M1 MoSIG academic supervisors for validation of your internship description/topic.
 - Write to both R. Lachaize and G. Mounié
 - The main validation criterion will be: <u>doing CS research inside a CS research team</u>
- Then, prepare the paperwork with the administrative services of the University
 - "Convention d'accueil" or "Convention de stage" depending on the situation
 - At Ensimag or UFR IM2AG depending on your student registration
 - (Details & contacts will be provided soon)

Academic labs/institutes in the Grenoble area (in alphabetical order)

- GIPSA-Lab: Images, speech, signal and control
 - (~16 teams)
 - <u>http://www.gipsa-lab.grenoble-inp.fr/en/home.php</u>
- **G-SCOP:** Production systems, product design and operational research
 - (~6 teams)
 - <u>http://www.g-scop.grenoble-inp.fr/en</u>
- Inria: Research institute in computer science, applied mathematics and control
 - (~23 teams)
 - Most of the teams are actually joint teams with other labs
 - <u>https://www.inria.fr/en/centre/grenoble</u>
- LIG: Grenoble Laboratory in Informatics
 - (~22 teams)
 - <u>https://www.liglab.fr/en</u>

- LJK: Laboratoire Jean Kuntzmann (applied mathematics and computer science)
 - (~17 teams)
 - <u>https://www-ljk.imag.fr/index_en.html</u>
- **TIMA:** Informatics and Microelectronics for integrated systems Architecture
 - (~4 teams)
 - <u>http://tima.univ-grenoble-alpes.fr/tima/en/index.html</u>
- **TIMC-IMAG:** Computer science and applied mathematics for understanding and controlling normal and pathological processes in biology and healthcare
 - (~12 teams)
 - <u>https://www-timc.imag.fr/en</u>
- Verimag: Embedded systems
 - (~5 teams)
 - http://www-verimag.imag.fr/?lang=en

Some other labs in the area

• CEA:

- R&D in defense and security, energy, technological research for industry, physical sciences and life sciences.
- http://www.cea.fr/english

• Industrial labs:

- Bull Atos (AI, HPC, smart energy, ...)
- Naver Labs (computer vision, natural language processing, machine learning, optimization)
- Orange Labs
- Schneider Electric
- HPE (AI, HPC, Telecom, Edge, ...)
- STMicroelectronics, Kalray ...
- Apple, Google, Huawei, Salesforce ...

Database of Master internship offers for Grenoble CS students

"Pcarre" platform:

http://im2ag-pcarre.univ-grenoble-alpes.fr/

(Check regularly)

If necessary, we will also forward to you other offers that we may receive (in case they do not appear on Pcarre), through the M1 Mosig web site

"Speed dating" session

- Quick presentations of some topics & internships offers, given by our colleagues from the Grenoble labs
- Followed by individual/small-group discussions with the interested students
- Will take place at UFR IM2AG (specifically for M1 MoSIG students)
- Date: Thursday October 12, 2023, from 14:00 to 15:30 (room F320)

Some advice for your applications

- "Cold" emailing generally has a low success rate ...
 - But may be worth a try for topics/researchers that you are really interested in

• Try to leverage:

- "Face-to-face" interactions:
 - Contacts with teachers during lectures
 - Meetings/seminars ...
- Published/on-line offers
 - Even if they are not initially framed for M1 internships (e.g., M2, PhD ...) ... or not for the current academic year
- **Come prepared** for your appointments/interviews
- Be clear about your current skills and ongoing training and how they match with the position

Finding research publications

- When exploring the research topics of some groups/researchers, you may want to take a look at some of their recent publications
- ... but the web pages of some research groups or some researchers may not provide the PDF files corresponding to all the publications or even an up-to-date list of publications.
- The following web sites may be useful to retrieve the list of publications and/or the corresponding documents:
 - HAL: <u>https://hal.archives-ouvertes.fr</u>
 - Google Scholar: <u>https://scholar.google.com</u>
 - Arxiv.org: <u>https://arxiv.org</u>
 - DBLP (mostly for lists, not for documents): <u>https://dblp.org</u>