SEM

OR *TRAINING THROUGH RESEARCH ON ADVANCED SOFTWARE ENGINEERING TOPICS*

ESIR3 SI, 2023-2024

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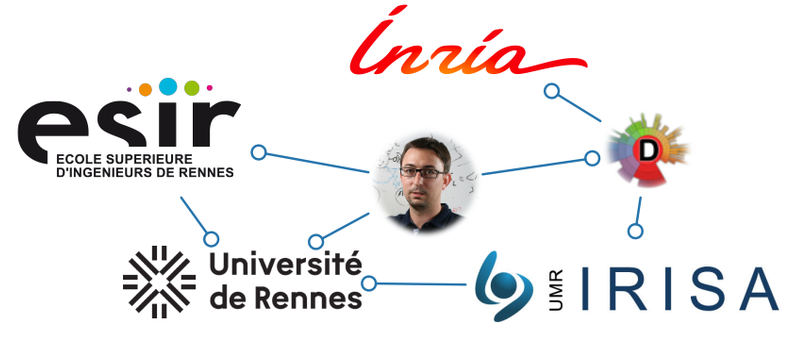

Motivation

- Academia and Industry are not in silo!
- Most of software paradigms come from academia
- Most of software experiences are reported to academia
- The scientific rigor is expected/appreciated by both academia and industry
  - Side note: In industry, the PhD is increasingly recognized in France (and since a long time abroad)
- A software engineer must build her own, sound and strong vision

Objectives

- Get the basics to scientifically conduct a review of a given topic
  - Insights on the scientific method
  - Application to the review a specific field
- Current (hot) SE topics
  - Foresee the future evolution and coming technologies
  - Understand the past, present, future to get a vision.

Overall Organization

- Conferences on some hot topics of software engineering

- Review of a given topic among other hot topics of software engineering
  - Research topics: https://github.com/selabs-ur1/research
  - Assignments:

Lecture	Material
Introduction of the course	slides
Scientific Method	slides
Scientific Method, cond.	
Sustainable Digitalization	slides
Sustainable Digitalization, cond.	
Secure Supply Chain (conf)	slides
Open Hours	
Open Hours	
Generative AI for Software Engineering (conf)	slides
Open Hours	
Open Hours	
Privacy and Web Engineering (conf)	slides
Open Hours	
Presentation & Evaluation	
Presentation & Evaluation, cond.	
Presentation & Evaluation, cond.	

Evaluation

- Final exam (individual) about the lecture and the different conferences (50%)
  - Feb. 12th
- Presentation (15", per group of 3) of the research topic addressed (50%)
  - Note: the presentations are for all!