

ISERN 2018	
Sunday, October 7	
18.00	Registration opening
19:00	Welcome Reception. Venue: Hotel Lasaretti

ISERN 2018			
Monday, October 8			
09:00-10:00	ISERN Welcome - News, Introductions, Observers and Candidates		
10:00-10:30	<i>Coffee-break (in the room)</i>		
10:30-12:00	<table border="1"> <tr> <td>S1: Call for Action! Escaping the Software Engineering Method Prison: Is it still a myth or can it become a reality Chairs: P. Abrahamsson, X. Wang</td> <td>S2: Encouraging more academic/industry interactions Chairs: R. Prikladnicki, C. Lassenius, M. Felderer, J. Carver</td> </tr> </table>	S1: Call for Action! Escaping the Software Engineering Method Prison: Is it still a myth or can it become a reality Chairs: P. Abrahamsson, X. Wang	S2: Encouraging more academic/industry interactions Chairs: R. Prikladnicki, C. Lassenius, M. Felderer, J. Carver
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12:00-13:00	<i>Lunch</i>		
13:00-14:30	Plenary Session: Challenges and Pitfalls of Academia and Industry Collaboration Chairs: Guilherme H. Travassos, M. Felderer		
14:30-15:00	<i>Coffee-break (at restaurant)</i>		
15:00-16:30	<table border="1"> <tr> <td>S3: Practitioners' Perception of Research: Towards an Established Procedure Chair: X. Franch, D. Méndez</td> <td>S4: <u>Open Space</u> Optional Focus Group on Quality in Empirical Software Engineering Research (J. Mollerli, M.Felderer)</td> </tr> </table>	S3: Practitioners' Perception of Research: Towards an Established Procedure Chair: X. Franch, D. Méndez	S4: <u>Open Space</u> Optional Focus Group on Quality in Empirical Software Engineering Research (J. Mollerli, M.Felderer)
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16:30-17:00	Summary & Wrapup		
17:00-18:00	ISERN Steering Committee Meeting (by invitation)		
19:00	ISERN Social Dinner: Lapland Hotel Oulu, Restaurant Oula. Dress code: Smart Casual		

ISERN 2018			
Tuesday, October 9			
9:00-10:00	Plenary Session: State-of-the-Art Research Practices in Empirical Software Engineering: What are they? Chairs: Guilherme H. Travassos, Michael Felderer		
10:00-10:30	<i>Coffee-break (in the room)</i>		
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12:00-13:00	<i>Lunch</i>		
13:00-14:30	Working Plenary Session: State-of-the-Art Research Practices in Empirical Software Engineering: How to advance them? Chairs: Michael Felderer, Guilherme H. Travassos, Maria Teresa Baldassarre		
14:30-15:00	<i>Coffee-break (at restaurant)</i>		
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16:30-17:00	Summaries and ISERN Business - Closing		

More Information on the ISERN Sessions and Plenary Sessions:

Plenary Session: Challenges and Pitfalls of Academia and Industry Collaboration

Organizers: Guilherme H. Travassos, M. Felderer

On stage: to be announced + audience

Style: short presentations and discussions

Plenary Session: State-of-the-Art Research Practices in Empirical Software Engineering: What are they?

Organizers: Guilherme H. Travassos, Michael Felderer

On stage: to be announced + audience

Style: short presentations and discussions

Working Plenary Session: State-of-the-Art Research Practices in Empirical Software Engineering: How to advance them?

Organizers: Michael Felderer, Guilherme H. Travassos, Maria Teresa Baldassarre

Style: Workshop

S1: Call for Action! Escaping the Software Engineering Method Prison: Is it still a myth or can it become a reality

Organizers:

Pekka Abrahamsson, University of Jyväskylä, Finland Xiaofeng Wang, Free University of Bozen Bolzano, Italy

Description:

Software engineering is a field where new methods pop out every year or two. Some argue that there are thousands of methods being proposed since the 1970's. A great majority of them were never found, and even the most promising ones are long forgotten as the software industry moves rapidly forward. Agile software development became the industry-de-facto standard in a decade. Yet, up until today, there is no common agreement as to what agile development means in concrete terms. Still, companies and researchers continue to attempt to scale Agile methods to work in large contexts. Lean/kanban movement and flow thinking was shaping the thinking a few years ago. Today it is the continuous deployment that is said to change "everything" in software development. SEMAT Essence Kernel was the result of a Software Engineering Method and Theory project. It provides a set of common elements that are found in every software engineering project and a way to track progress in a simple way. It is method and tool agnostic and is argued to form a common ground for the software industry to improve its performance. What is the status of the SEMAT initiative today and how the Empirical Software Engineering community can benefit from it are the two questions that the workshop will tackle.

Style: Workshop

Goals:

- Agree what exactly is broken in software engineering method education
- Discuss ways to fix the problems and identify best practices
- Understand what is SEMAT initiative, the state-of-the-art research and industry adoption today
- Identify concretely how the ESE community can benefit from SEMAT initiative outcomes

- Form an action group fostering industry-relevant SE education
- Plan a joint experiment surrounding software engineering method education

Session structure (1h45min):

- introduction to session, goals
- Motivation - What is broken in software engineering method education
- Work in mini-groups - part I: Come up with ways to fix what is broken in Software Engineering Method education
- SEMAT today in education, research, and industry
- Work in mini-groups - part II: How ESE community can benefit from SEMAT
- Individual work (requires a laptop): Complete an exercise
- Work in mini-groups - part III: Report results on an exercise
- Work in mini-groups - part IV: Planning of an experiment for SE method education
- Concluding the session, next steps and action points

S2: Encouraging more academic/industry interactions

Organizers: Rafael Prikladnicki, Casper Lassenius, Michael Felderer, Jeffrey Carver

Goals:

- (1) Identify existing relationships between ISERN members and industrial organizations;
- (2) Identify potential collaborations among ISERN members and industrial organizations;
- (3) Document lessons learned about academic/industrial interactions

Style: workshop

Session structure:

Develop a map of the industrial connections among ISERN members. We do not have to identify the specific industrial partners, but rather where the partners are located, what type of industry, what are their needs/interests, etc... We will also identify the interests of ISERN members who are looking for industrial partners to validate their research ideas. The outcome will be an idea of how many ISERNers are connected with industrial partners in various areas and a set of potential connections for new collaborations. We plan to collect the data before ISERN, using the ISERN network.

The results could be presented in a plenary session as well.

Share IAC cases from ISERN members. This portion will be a group discussion where ISERN members describe their experiences (both good and bad) with industrial partners. It will also allow us to gather more information about where industrial partners have interests but have not yet formed a collaboration.

Identify and summarize lessons learned and good practices for Industry/Academic collaborations in empirical software engineering. The outcome of this discussion will help us, as a community, begin to understand how to anchor the benefits of empirical research in the industry better and attract funding for empirical studies.

S3: Practitioners' Perception of Research: Towards an Established Procedure

Organizers: Xavier Franch, Daniel Méndez, Jeff Carver

Goals: In recent years, we have seen a gain in studies with the purpose to explore the practical relevance of our research outcome. The NaPiRE initiative is one example, but more recent work directly addresses this topic with survey research. At the keynote of ESEM 2015, Tom Zimmermann presented a study where they evaluated the practical relevance of software engineering papers from the perspective of practitioners at Microsoft. This presentation has already led to two subsequent replication studies; one was conducted to evaluate the relevance of ESEM papers and one to evaluate the relevance of papers in the Requirements Engineering community.

Given that such studies are gaining importance in the various software engineering communities, we aim at elaborating and, at some point in time disseminating, principles and research procedures under the umbrella of ISERN. The goal of the thematic workshop is to share experiences and lessons learned in conducting studies to elaborate the practical relevance of our research outcomes to lay a foundation for such shared research procedures and principles.

Style: Workshop

Session structure: The session will be organized as follows:

- Opening of the session with motivation and joint elaboration of long-term goals and use cases based on shared interests among the participants
- Overview of recent studies (including presentations by organizers and invited ones):
 - Goals and methodologies used in the studies
 - Challenges and lessons learned: “What would have been useful to know in advance?”
- Breakout session to analyze and structure how the lessons learned can be used to improve our procedures in understanding and to increase the practical relevance of SE research
- Consolidation of discussion and planning of next steps:
 - Identification of potential for new studies
 - Planning of methodological research paper summarizing the workshop results

S4, S8: **Open Space:** ISERN members and participants can meet, discuss and elaborate any ISERN related activity during into these spots. It is expected Open Spaces activities being reported at Summary moments. S4 includes an optional **Focus Group on Quality in Empirical Software Engineering Research** organized by Jefferson Moller and Michael Felderer.

S5: Naming the Pain in Requirements Engineering – NaPiRE. Towards new collaborations and research formats

Organizers: Daniel Méndez, Daniel Graziotin, Marcos Kalinowski, Michael Felderer

Description: During last years' ISERN meetings, we conducted thematic workshops to plan our globally family of distributed surveys on industrial requirements engineering (RE) practices and problems, called NaPiRE (Naming the Pain in Requirements Engineering). Out of this work, hosted now under the umbrella of ISERN, a project emerged in which, so far, over 60 researchers

from 25 countries are engaged (continuously growing fast). The overall goal is to define the first theory of RE practices and problems. As for today, we completed three NaPiRE replications, are continuously disseminating our results and started building a multitude of follow-up work based on the NaPiRE data. Details about the project can be taken from <http://www.napire.org>

Goals: Besides bringing in new researchers in participating in the ongoing project, the goal of this upcoming thematic workshop is particularly to jointly

1. Discuss in the group of participants the current results of the NaPiRE project and the current replication and revisit the current organizational structure.
2. Start planning for new collaborations and research formats rooted in the NaPiRE results

Given the complexity of the NaPiRE project and the level of details in the results, we plan to discuss how we can make use of these results for research projects going beyond descriptive analyses and interpretations. First results of using NaPiRE for follow-up investigations – ranging from analytical work on human errors classification or defect prevention to constructive work on evidence-based risk management – have demonstrated how fruitful follow-up investigations can be. In this workshop, we, therefore, plan to concentrate on

- Discussing how the NaPiRE data can be further used as part of collaborations going beyond the core of NaPiRE
- Establishing an internal NaPiRE collaboration platform that facilitates the flexible proposal of small collaboration projects and the dynamic configuration of research teams.

We plan to use the open space event during day 1 to discuss jointly the current results from our surveys and to collect first ideas for a collaboration platform as a preparation of the workshop but also introduce interested ISERN members not previously involved into the project.

Style: Workshop

Session Structure: To conduct the workshop in a systematic manner, we propose to:

1. Introduce the complete NaPiRE concept and report on the analysis results prepared by the organizers in advance
2. Form groups to
 - a. work on ideas for follow-up collaborations
 - b. propose an idea for a collaboration platform
3. Agree on a schedule and project organization based on a proposal brought in by the organizers

Expected Outcome and Plan for continuing the Work beyond ISERN session: The whole workshop is intended to strengthen the collaboration and plan the dissemination of the results after the ISERN session. We will continue to steer the family of surveys over the next years and to build a continuum in this project under the umbrella of ISERN whereby this workshop builds one consequent next step in this endeavor.

Expected Knowledge: ISERN Members who already conducted the RE survey in this year are expected to participate. Members not previously involved should read the information provided on the website <http://www.napire.org/> as well as the documents listed therein.

S6: Diversifying data Collection in Empirical Research in Software Engineering

Organizers: Daniela Cruzes / Ali Babar

Goals: Discussions on how to do better data collection in the industry and still be accepted as good and systematic research data. Many studies are too focused on shallow interviews or shallow surveys or document analysis, and we are not exploring enough the richness of data we can get from the software development environment. Some questions are: How can we systematically use data from observations? What about all the other data that we collect every day when we go to a company? How much are we trusting in shallow interviews?

Style: Discussion

S7: Promoting integrity in the use of research results

Organizer: Dietmar Pfahl

Description: PROMoting integrity in the use of RESearch results (PRO-RES) is a recently started EU-funded coordination and support action, which aims at providing input to EU policymakers regarding research ethics when shaping the future FP Europe research agenda. Part of the project is a series of workshops with stakeholders (including researchers, research managers, policy makers, research partners in the industry) that shall serve consultation purposes. The University of Tartu, jointly with the CNR-ISTI, Pisa, is in charge of organizing two such workshops on the topic "Behavioral research collecting data from social media/internet sources." My goal is to interest and engages the ISERN community in the goals of the PRO-RES initiative.

Style: Workshop

Goals:

- Inform about PRO-RES
- Get input from SE researchers on ethical issues relevant for researchers
- Raise interest among ISERN members from Nordic/Baltic countries to participate as a stakeholder in one of the upcoming PRO-RES workshops

Session structure:

- Brief intro into PRO-RES
- Group work (case scenarios will be received as input)
- Group reporting & Synthesis
- Discussion & wrap-up