FOUNDATIONS TRACKS

We invite authors to submit high quality research papers describing significant, original, and unpublished results in any of the following tracks and categories:

### Tracks

- SET Software Engineering Track
- WER Requirements Engineering Track
- ESELAW Experimental Software Engineering Track

# Categories

 Technical Papers (not exceeding 14 pages): Technical papers should describe innovative research in the topics of the Foundations tracks. Papers in this submission category should describe a novel contribution to the topics and should carefully support claims of novelty with citations to the relevant literature.

Evaluation criteria: Technical papers are evaluated on the basis of originality, soundness, relevance, importance of contribution, strength of validation, quality of presentation and appropriate comparison to related work. Where a submission builds upon previous work of the author(s), the novelty of the new contribution must be described clearly with respect to the previous work. Technical papers need to discuss clearly how the results were validated.

- 2. **(NEW!)** Emerging Ideas Papers (not exceeding 8 pages): Emerging ideas papers describe new, non-conventional approaches on the topics of the Foundations tracks, that depart from standard practice. They are intended to describe well-defined research ideas that are at an early stage of investigation.
  - Evaluation criteria: Emerging ideas papers will be assessed primarily on their level of originality and potential for impact on the field in terms of promoting innovative thinking. Hence, inadequacies in the state-of-the-art and the pertinence, correctness, and impact of the idea must be described clearly. While the idea that is described does not need to be fully validated, a presentation of preliminary results that provide initial insights into the feasibility and/or impact of the idea is expected. In case of paper acceptance, authors have to prepare a poster from the paper and present it in the Poster Session. The Poster Session separates itself from the Technical Papers' Sessions by allowing authors the ability to get immediate, personal feedback from conference attendees during the session as they present their work. Posters also provide conference attendees an opportunity to see new work in the field in a more relaxed setting.
- 3. (NEW!) Tools Papers (not exceeding 8 pages): These papers should describe tools that complement research papers from two different perspectives: (i) The tool has been used previously as part of a support pipeline (e.g., to collect data, evaluate results, etc.); (ii) The tool implements a previously proposed technique/approach. The submissions must fall under the topics of the Foundations tracks and include a short video (Max. 5 minutes) describing the main features of the presented tool. The link to the video should be included in the paper abstract. Note that commercial products cannot be accepted. The tool demo track is for promoting scientific contributions instead of promoting sales of a tool currently being commercialized. Authors of accepted tool demo papers will be

invited to give a presentation and present the tool in the Hands-on session. Both presentation and hands-on will be scheduled within the program.

Evaluation criteria: We look for papers that include: (i) Clear motivation for the tool; (ii) The software engineering task/challenges the tool aims to address; (iii) Discussion regarding similar tools; (iv) Description of the tool features, envisioned users, and usage scenarios; (v) Results of validation studies for the case of mature tools, or design of planned studies if the tool is an early prototype.

Below, you will find details on the dates, the submission and evaluation of papers, besides the important topics and organization committee of each Foundations track.

### **IMPORTANT DATES**

Abstract submission: December, 4th, 2017 Paper submission: December 11st, 2017 Notification to authors: February 5th, 2018 Camera-Ready: February 26th, 2018

#### SUBMISSIONS

All papers must be submitted through the EasyChair submission system at https://easychair.org/conferences/, using PDF format only. Submissions must be formatted according to the LNCS style. At least one author of accepted papers must register by the camera-ready deadline. One registration corresponds to only one paper.

### **EVALUATION PROCESS**

Any paper which is not within the scope of the conference, or do not follow the formatting guidelines will be desk-rejected without review. All other submissions are going to be peer reviewed by at least three members of the Program Committee.

All accepted papers will be published by the organization in the conference proceedings that will be indexed in Scopus and DBLP.

The best paper of each track will receive an award certificate. We are also working to publish the best papers in a special issue of an international journal.

Software Engineering Track (SET)	

SET is a forum where researchers and practitioners from the Ibero-American community may report and discuss new research results in all the areas of Software Engineering, except for topics in requirements engineering and empirical software engineering, which are discussed in the corresponding specialized tracks.

### **TOPICS**

Topics of interest include, but are not limited to, the following:

- Software Processes and Methodologies
- Model-driven software engineering
- Automatic software generation
- Reverse engineering and software system modernization
- Software evolution and maintenance
- Quality, measurement, and assessment of products and processes
- Software Testing

- Software architectures
- Search-based software engineering
- Web engineering and Web services
- Software product families and variability
- Software reuse
- Software Language Engineering
- Formal methods applied to software engineering
- Integration with human-computer interaction
- Ontologies applied to software engineering
- Software Engineering for Self-Adaptive and Autonomous Systems
- Software Engineering for cyber-physical systems

### **SET PROGRAM CHAIRS**

Francisco Pino (Universidad del Cauca, Colombia) Jesús García Molina (Universidad de Murcia, España)

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Requirements Engineering Track (WER)

This track is the evolution of the Workshop on Requirements Engineering. This workshop started as a meeting of the Ibero-American requirements engineering community, but over the years has attracted attention from researchers from other parts of the world as well. WER is now an integral part of CIbSE as a whole.

### **TOPICS**

Topics of interest include, but are not limited to, the following:

- Requirements elicitation, analysis, and documentation.
- · Requirements validation, and visualization.
- Requirements specification languages, methods, processes, and tools.
- Requirements management, traceability, prioritization, and negotiation.
- Requirements in agile methods.
- Requirements in Model-Driven Development.
- Non-functional requirements.
- Regulatory compliance.
- Requirements engineering and software architecture.
- Aspect-oriented requirements engineering.
- Service-oriented requirements engineering.
- Requirements for Web-based systems and mobile applications.
- Requirements engineering for self-adaptive systems.
- Requirements for the agent-oriented paradigm.
- Requirements for product lines.
- Social, cultural, and cognitive factors in requirements engineering.
- Aligning requirements to business goals and processes.
- Requirements engineering education and training.

# WER PROGRAM CHAIRS

Isabel Sofia Brito (Polytechnic Institute of Beja, Portugal) Giovanni Giachetti (Universidad Tecnológica de Chile INACAP, Chile) Experimental Software Engineering Track (ESELAW)

This track is the evolution of the Workshop on Experimental Software Engineering. ESELAW provides a stimulating forum at which researchers and practitioners can present and discuss recent research results on a wide range of topics related to Experimental Software Engineering. In addition, the track encourages the exchange of ideas so as to understand the strengths and weaknesses of software engineering technologies and methods from a strong empirical viewpoint, including different kinds of empirical studies. Research on empirical methods and the design and analysis of empirical studies are also welcome. ESELAW is now an integral part of CIbSE as a whole.

# **TOPICS**

Topics of interest include, but are not limited to, the following:

- Studies concerned with software processes and products.
- The evaluation and comparison of techniques and models (cost estimation, analysis and design methods, testing, etc.).
- Reports on benefits derived from using specific software technologies.
- The development of predictive models for software engineering.
- Experiences with research methods: measurement theory, experimental design, qualitative modeling, analysis approaches, grounded theory, protocol studies, families of experiments, etc.
- The development, derivation and/or comparison of organizational models of the software development of industrial experience in process improvement.
- Quality measurement.
- Mining software repositories.
- Process modeling and applications in industry.
- Systematic reviews and evidence-based software engineering.
- Simulation-based studies in software engineering.
- Education and training in experimental software engineering.
- Industrial experience, case studies, action-research, etc.
- New ideas regarding the measurement, evaluation, comparison and development of empirical software methods.
- Infrastructures and new techniques with which to conduct empirical studies.
- Replication of empirical studies

# **ESELAW PROGRAM CHAIRS**

Beatriz Marín (Universidad Diego Portales, Chile) Tayana Conte (Universidade Federal do Amazonas, Brasil)