

Welcome from the Workshop Chairs

Welcome to the fifth International Workshop on Empirical Requirements Engineering (EmpiRE 2015) at RE'15!

In the past few years, some important developments in the Information Technology Services marketplace as well as in the software industry in particular fueled the debate on the evaluation of Requirements Engineering (RE) approaches, techniques and tools and the comparison of their usefulness, effectiveness and utility in specific practical contexts. Examples of such market trends include, among many others, the increased interest in collaborative and just-in-time application of RE techniques and the use of software analytics techniques for mining requirements repositories. Also, existing RE technology is more and more being applied in the context of new areas, such as Internet of Things, software ecosystems, green and Cloud computing, to name a few. This increased interest in empirical evaluation is precipitating a growing number of industry-university collaborations in the RE community, which, in turn, is instrumental in generating empirical data through case studies, action research studies, experiments, and surveys. As empirical studies are recognized as invaluable for assessing the actual benefits and cost of applying the RE methods and tools proposed in the RE community, the conversation on adopting these and on evaluation practices intensifies even further.

The overall objective of the EmpiRE workshop series at the annual RE conference is to increase the cross-fertilization of Empirical Software Engineering (ESE) methods and RE by actively encouraging the exchange of knowledge and ideas between the communities of ESE and RE. Since its launch at RE'11 in Trento, the EmpiRE workshop has been serving as the platform promoting the use of new evaluation techniques from ESE in the area of RE as well as the discussion on new domains and problems in RE where involving ESE will make a significant difference. Some outcomes of the past editions of EmpiRE include the identification of open research problems and the possible solutions to these problems regarding: (i) the aspects of RE approaches that can be evaluated; (ii) the factors and metrics that are appropriate for empirical evaluation purposes; (iii) the generalization of case studies in RE; (iv) the replication of empirical RE studies; (v) the role of the users' perspectives in empirical RE; and (vi) the aggregation and synthesis of empirical evidence produced by multiple empirical studies on a particular topic.

The fifth edition of EmpiRE builds upon the four workshops hosted during the period 2011-2014. It is a further step towards establishing an inclusive forum in which experienced researchers, PhD candidates, practitioners and students can inform each other, learn about, discuss, and advance the state-of-the-art research and practice in empirical RE. The mission of EmpiRE 2015 is to shape the next phase of cross-fertilization of RE and ESE, specifically:

- 1) to open up the inter-disciplinary debate on the steadily moving frontiers in empirical RE,
- 2) to help leverage past investments in empirical RE studies to strengthen interdisciplinary collaboration, and
- 3) to extend the network of practitioners and researchers involved in empirical RE studies.

New to EmpiRE 2015 is the inclusion of breakout sessions on research design, where PhD students will present ongoing RE research and their selected research methods. In these sessions, the workshop attendees brainstorm ideas on topics that relate to research methods, collaboration with industry and evaluation of empirical evidence, in order to strengthen empirical research approaches and their validity.

EmpiRE 2015 received 15 submissions, each of which was reviewed by three members of the workshop's program committee, composed of 32 scientists and practitioners. Of these submissions, five have been accepted as full technical papers, one as a position paper and three as research design papers. The resulting EmpiRE 2015 program features empirical studies illustrating the use of industry surveys, experiments, case studies, mapping studies as ESE techniques applied to the following RE subdomains: collaborative RE, security RE, open source RE, requirements ambiguity, requirements prioritization, and requirements modelling.

We would like to thank the Program Committee members for their dedication to rigorous and timely peer review, which allowed us to highlight the very best research from the empirical RE community. We also thank all the authors for their submissions to EmpiRE 2015. Finally, we would like to express our appreciation for the timely response and assistance that we received from the organizing committee and the staff of the RE'15 conference and, in particular, to the RE'15 General Chair, Daniel Amyot, and the RE'15 Workshop Chairs Lin Liu and Xavier Franch.

We hope you will enjoy the workshop and the workshop proceedings.

The EmpiRE 2015 organizing team:

Richard Berntsson Svensson (general chair), *Blekinge Institute of Technology, Sweden*
Maya Daneva, *University of Twente, The Netherlands*
Sabrina Marczak, *PUCRS University, Brazil*
Neil Ernst, *Software Engineering Institute, USA*
Nazim Madhavji, *University of Western Ontario, Canada*

Committees

Organizing Committee

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Program Committee

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- David Ameller, *Universitat Politècnica de Catalunya, Spain*
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- Elizabeth Bjarnasson, *Lund University, Sweden*
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- Preethu Rose, *RE Group, TATA Research Development and Design Center, India*
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- Pnina Soffer, *Haifa University, Israel*
- Marco Torchiano, *Politecnico di Torino, Italy*