

REFSQ 2016: Joint Proceedings of Workshops, Doctoral Symposium, Research Method Track, and Poster Track

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Preface

The 22nd International Conference on Requirements Engineering: Foundation for Software Quality took place on March 14-17, 2016 in Gothenburg, Sweden. REFSQ 2016 publishes reports of novel ideas and techniques that enhance the quality of requirements engineering (RE) products and processes, as well as reflections on current research and industrial RE practices.

The special theme for REFSQ'16 was “*Understanding an ever changing world through the right requirements*”. REFSQ'16 encouraged submissions that highlight the utilization of RE for solving our society's great problems, inviting to an inclusive conversation covering various perspectives, such as systems engineering, economics and management. A particular aspect of the 2016 theme was its strong focus on software ecosystems and cross-organizational collaboration, for example between established companies and startups, in order to increase innovation capabilities, reduce time to market, and to support development for and in software ecosystems.

The REFSQ conferences also have a tradition of hosting associated events, where participants are able to focus on emerging topics of RE as the foundation of software quality. On workshop day, March 14th, three workshops and the doctoral symposium were organized, where as the research method track and poster sessions took place during the conference days. The content of these sessions is published in these proceedings.

The three workshops at REFS 2016 were carefully selected based on their quality, attractiveness and potential interested to the suggested topics:

- *CRE: 2nd Workshop on Continuous Requirements Engineering* (organised by Peter Forbrig, Marite Kirikova, Ahmed Seffah):
When changes are frequent and high flexibility is required, in large systems the engineering processes grow into continuous engineering. Continuous engineering naturally requires continuous RE that can combine rigid engineering principles with agility, emergence, and spontaneity to support sustainability and viability of the systems.

- *RESACS: Second International Workshop on Requirements Engineering for Self-Adaptive and Cyber Physical Systems* (organised by Marian Daun, Cristina Palomares, Bastian Tenbergen):
Self-adaptive systems (SAS) and cyber physical systems (CPS) represent novel categories of software-intensive systems insofar that they possess significantly different properties than traditional information systems or embedded systems. For example, their highly connected and context-aware nature gives rise to changes in their runtime behaviour, stressing the need for runtime adaptation and reorganization, which must be considered during the requirements phase.
- *RET: 3rd International Workshop on Requirements Engineering and Testing* (organised by Gregory Gay, Elizabeth Bjarnason, Mikael Unterkalmsteiner, Michael Felderer, Markus Borg, Mirko Morandini):
The coordination of RE and Testing affects the efficiency and the effectiveness of the entire software development cycle and its lead time, making this an important topic from a business perspective. While much work has been done in the respective fields of RE and Testing, there exists much more that can be done to increase the connection between the RE and the Testing process.

This volume also includes papers of the REFSQ 2016 Research Method Track, Doctoral Symposium and Posters and Tool Session. The main goal of the *Research Method Track* (organised by Oscar Dieste and Barbara Paech) is to stimulate discussion on how to assess state-of-art, how to generalize from empirical studies, and how to set up longitudinal studies. The goals of the *Doctoral Symposium* (organized by Xavier Franch and Jennifer Horkoff) are to provide PhD students with an opportunity to present and discuss their present work – in early as well as advanced stages of their research –, to provide all participant students with advice and suggestions from a panel of senior researchers, and to facilitate interaction among all the participants. The *Posters and Tool Session* (organised by Kai Petersen and Sergio España) is a forum to present posters and demonstrate tools covering any aspect of RE. It gives researchers the chance to present their most recent work and obtain early feedback on ongoing research.

We would like to thank all Workshop, Doctoral Symposium, Research Method track and Poster Session Chairs and their Program Committees for their diligence in selecting the papers and ensuring their high scientific quality.