

# REFSQ 2018: Joint Proceedings of Workshops, Doctoral Symposium, Live Studies, and Posters and Tools Track

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## 1 Preface

The 24th International Conference on Requirements Engineering: Foundation for Software Quality took place from March 19th to March 22nd, 2018 in Utrecht, The Netherlands. REFSQ Working Conferences aim at providing a forum for new and innovative ideas and approaches to successful Requirements Engineering (RE) and for exchange between researchers and practitioners. The special theme of REFSQ'18 is “RE and Digital Transformation” to emphasize an important issue: what role can RE play in the dramatic changes that take place in our society today to innovate and design new heterogeneous systems and services to fit the needs of users and to keep values of society. 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. The co-located events kept also in mind the special theme of the conference.

On the workshop day, March 19th, five workshops and the doctoral symposium were organized, whereas the live studies and posters and tools track session took place during the remaining conference days. The five workshops at REFSQ'18 were carefully selected based on their quality, attractiveness, and their potential to attract attendants. This led to the following workshops:

- NLP4RE: 1st Workshop on Natural Language Processing for Requirements Engineering (organized by Fabiano Dalpiaz, Alessio Ferrari, Xavier Franch, and Cristina Palomares): Natural language processing (NLP) has played an important role in several computer science areas and requirements engineering (RE) is not an exception. In the last years, the advent of massive and very heterogeneous natural language (NL) RE-relevant sources, like tweets and app reviews, has attracted even more interest from the RE community. The main goal of the NLP4RE workshop is to set up a regular meeting point for the researchers on NLP technologies in RE in which the advances, challenges, and barriers that they encounter may be communicated, and collaborations may emerge naturally.
- CRE: 4th Workshop on Continuous Requirements Engineering (organized by Peter Forbrig and Marite Kirikova): 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. The challenge of the workshop is to support continuous requirements engineering approaches, methods, models, and tools for multi-scale fast-changing enterprises and predictable and unpredictable configurations of enterprise networks.
- FIRE: 1st International Workshop on Facilitating Inclusive Requirements Engineering (organized by Dirk van der Linden, Anna Zamansky, and Yoram Chisik): The FIRE workshop aims to stimulate a discussion on the ways in which the RE toolbox with its heavy reliance on verbal techniques can be expanded and refined to be more inclusive and thus better support the needs of special groups of people as well as other species, entities, and environments. Inclusive RE practices are practices going beyond verbal communication, embracing the otherness of a group of users and extending empathy and understanding to these users. The

FIRE workshop aims to initiate a discourse between researchers and practitioners working in domains where iRE practices are required, towards the creation of a wider, more refined RE toolbox facilitating inclusiveness.

- **CREARE: 7th International Workshop on Creativity in Requirements Engineering** (organized by Daniel M. Berry, Maya Daneva, Eduard C. Groen, and Andrea Herrmann) The CreaRE workshop brings together RE practitioners and researchers who are interested in discussing the role of creativity in RE, the array of creativity techniques that can be applied to RE, and the ways in which creativity techniques from other disciplines can be leveraged in RE. It also aims at raising awareness in the RE community of the importance of creativity techniques, and creative elements in RE and development processes.
- **Requirements for self-driving guidance software** (organized by David Gelperin): Given the advancements in the development of autonomous vehicles (AVs) and all the relevant requirements challenges associated with it, this workshop aims at identifying both major risks with the current competitive approaches to AVs and potential actions to raise public awareness of safer alternatives. This includes RE alternatives and verification alternatives. Moreover, the workshop focuses on exploring the feasibility of an ISO standard on “meta-requirements for critical software”.

The 2018 REFSQ call for workshops welcomed both traditional and paperless workshops. In particular, CREARE and “Requirements for self-driving guidance software” have been proposed in a paperless format, so they will be not included in this volume as there are no associated, peer-reviewed papers. Moreover, given the topics of the selected papers CRE and FIRE joined forces and have been run as a single one day workshop, thus they have been included in this volume in the same way.

These proceedings contain also the content of the following tracks:

**REFSQ’18 Doctoral Symposium** The goals of the Doctoral Symposium (organized by Jolita Ralyté and Pete Sawyer) is to provide PhD students with an opportunity to present and discuss their work in early as well as advanced stages of their doctoral research, to provide all participant students with advice and suggestions from a panel of senior researchers, and to facilitate interaction among all the participants.

**Live Studies** The main goal of the Live Studies (organized by Nazim Madhavji) is to stimulate discussion on how to assess state-of-art, how to generalize from empirical studies, and how to set up longitudinal studies.

**Posters and Tools Track** The Posters and Tools Track (organized by Mehrdad Sabetzadeh and Eya Ben Charrada) 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, Live Studies Track, and Posters and Tools Track Chairs as well as their Program Committees for their diligence in selecting the papers and ensuring their high scientific quality.