

Preface

Welcome to the proceedings of the 22nd edition of REFSQ: the International Working Conference on Requirements Engineering – Foundation for Software Quality!

Requirements engineering (RE) has been recognized as a critical factor that impacts the quality of software, systems, and services. Since the term “requirements engineering” was coined, the community of practitioners and researchers has been working tirelessly on the identification, characterization, and evaluation of the multifaceted relationships between aspects of requirements processes, artifacts, and methods and aspects of software quality. The REFSQ working conference series has been well established as Europe’s premier meeting place in RE and as one of the leading international forums dedicated to the conversation on RE and its many relationships to quality.

The first REFSQ was celebrated in 1994, in Utrecht, The Netherlands. Since then, the REFSQ community has been steadily growing and in 2010 REFSQ became a stand-alone conference. The five REFSQ editions in the period of 2010–2015 were hosted in Essen, Germany, and were organized by the Software Systems Engineering Team, under the leadership of Klaus Pohl, of the Ruhr Institute for Software Technology at the University of Duisburg-Essen, Germany. During March 14–17, 2016, we welcomed participants to REFSQ 2016, which was celebrated in Gothenburg, Sweden. The 22nd edition of REFSQ built upon the REFSQ editions hosted until 2015. It was a further step toward 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 the discipline of RE. We chose “Understanding an Ever-Changing World Through the Right Requirements” as the REFSQ 2016 special theme, in order to encourage submissions that highlight the utilization of RE for solving our society’s great problems. Our theme invited an inclusive conversation covering various perspectives, such as systems engineering, economics, and management. A particular aspect of our 2016 theme is its strong focus on software ecosystems and inter-organizational collaboration, for example, between established companies and start-ups, in order to increase innovation capabilities, reduce time to market, and support development for and in software ecosystems.

We are pleased to present this volume comprising the REFSQ 2016 proceedings. It features 21 papers included in the technical program of REFSQ 2016 and presented during the conference. These papers were selected by an international committee of leading experts in RE who are affiliated with companies, universities, and academic institutions. The committee evaluated the papers via a thorough peer-review process. This year, 80 abstracts were initially submitted from 28 countries. Eleven abstracts were not followed up by papers and five abstracts were withdrawn. The review process included 64 papers. Each paper was reviewed by three members of the REFSQ 2016 Program Committee. An extensive online discussion among the Program Committee members enriched the reviews during the evaluation of the possible decision-making

outcomes for each paper. During a face-to-face Program Committee meeting that took place on December 4, 2015, in Gothenburg, Sweden, the papers were discussed and selected for inclusion in the conference proceedings. Selected authors of rejected papers were encouraged to submit their papers to the REFSQ 2016 workshops.

The REFSQ 2016 conference was organized as a three-day symposium. Two conference days were devoted to presentation and discussion of scientific papers. These two days were connected to the conference theme with a keynote, an invited talk, and poster presentations. The keynote speaker was Magne Jørgenssen from Simula, Norway. The invited talk was delivered by Roel Wieringa from the University of Twente, The Netherlands. One conference day was devoted to presentation and discussion of RE research methodology and industry experiences. On that day, two tracks ran in parallel: the Industry Track, organized by Ivica Crnkovic, and the Research Methodology Track, organized by Barbara Paech and Oscar Dieste. In a joint plenary session, researchers met with practitioners from industry to discuss how to manage requirements in ecosystems.

REFSQ 2016 would not have been possible without the engagement and support of many individuals who contributed in many different ways. As program co-chairs, we would like to thank the REFSQ Steering Committee members, in particular Klaus Pohl, Bjorn Regnell, and Xavier Franch for their availability and for the excellent guidance they provided. We are indebted to Kurt Schneider and Samuel Fricker, the REFSQ 2015 co-chairs, for their extremely helpful advice. We are grateful to all the members of the Program Committee for their timely and thorough reviews of the submissions and for their time dedicated to the online discussion and the face-to-face meeting. In particular, we thank those Program Committee members who volunteered to serve in the role of mentor, shepherd, or gatekeeper to authors of conditionally accepted papers. We would like to thank Eric Knauss, leading the Local Organization at Calmers University, for his ongoing support and determination to make sure all operational processes ran smoothly at all times. We are grateful to the chairs, who organized the various events included in REFSQ 2016:

- Barbara Paech and Oscar Dieste, chairs of the Research Methodology Track
- Ivica Crnkovic, the REFSQ 2016 Industry Track chair
- Andrea Herrmann and Andreas Opdahl, the REFSQ 2016 workshop chairs
- Xavier Franch and Jennifer Horkoff, chairs of the Doctoral Symposium
- Sergio España and Kai Petersen, chairs of the Poster and Tools Session

Finally, we would like to thank Tobias Kauffmann and Vanessa Stricker for their excellent work in coordinating the background organization processes, and Anna Kramer for her support in preparing this volume.

All the research papers from the REFSQ 2016 main conference track and the Research Methodology Track can be found in the present proceedings. The papers included in the satellite events can be found in the REFSQ 2016 workshop proceedings published with CEUR.

We hope this volume provides an informative perspective on the conversations that shape the REFSQ 2016 conference. We hope you will find research results and truly new ideas that help us to better understand our changing world through the right requirements!

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