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13975


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Alessio Ferrari · Birgit Penzenstadler  
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# Requirements Engineering: Foundation for Software Quality

29th International Working Conference, REFSQ 2023  
Barcelona, Spain, April 17–20, 2023  
Proceedings

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# Preface

This volume contains the papers presented at REFSQ 2023, the 29th International Working Conference on Requirements Engineering: Foundation for Software Quality, held on April 17–20, 2023 in Barcelona, Spain. We are very happy to report that submission numbers have gone up significantly and we are excited to host another in-person conference after a successful edition in Birmingham, UK, this past year. The REFSQ series was established in 1994, at first as a workshop series, and since 2010 in the “working conference” format, with ample time for presentations and substantial discussions of each contribution. It is often considered among the major international scientific events in Requirements Engineering, and the only one to be permanently located in Europe, with a special connection to European industry and academia. The need for ever-increasing levels of quality in requirements has not diminished in the 29 years since the first REFSQ; on the contrary, requirements are pervasive in the design, implementation, and operation of software systems and related services that impact the lives of billions. The special theme for REFSQ 2023 was “Human Values in Requirements Engineering”. Requirements Engineering (RE) is at the boundary of humans and technology, and values play a crucial role in the interplay between developers, users and systems. When developing technology, we get to be cognizant of how our values inform our designs, because we unconsciously embed them into our systems. In addition, we need to carefully consider possible conflicts between human values and business values. The theme of this year thus aimed to foster discussion around the following questions:

- How do we take care of human values in RE?
- How do we ensure that the systems we design incorporate the values we want them to stand for?
- How do we validate and measure values?
- How do we make sure that systems serve the human as opposed to having the human adapt to them?
- How much do developer habits and characteristics influence their designs?
- What is the interplay between developer and stakeholder values?
- What is the interplay between human values and business values?

We were very happy to observe that the challenge was promptly taken up by the research community, with many submissions focusing on exactly those issues. Several of those contributions were accepted for presentation at the conference, and are now part of this volume. In response to the Call for Papers, we received 84 abstracts, which resulted in 78 full papers, which were single-blind reviewed by three program committee members, extensively discussed among the reviewers, and then brought for additional discussion if needed and a final decision at the plenary program committee meeting that was held (online) on January 17 and 18, 2023. Nine papers for which no consensus had been reached were discussed in special depth, and all of them were accepted on the condition that certain improvements be made (those underwent an additional check by a PC member before final acceptance). Overall, 25 papers were finally accepted for

publication, and are now collected in this volume. In particular, based on paper category, the acceptance ratios are as follows:

- Scientific Evaluation (17 pages): 20 submissions, 7 accepted (35%)
- Technical Design (17 pages): 22 submissions, 5 accepted (23%)
- Experience report papers (14 pages): 14 submissions, 5 accepted (36%)
- Vision (10 pages): 3 submissions, 2 accepted (67%)
- Research Preview (10 pages): 14 submissions, 6 accepted (43%)

The acceptance rate of full contributions was thus 29% (12/42). As in previous years, the conference was organized as a three-day symposium (Tuesday to Thursday), with one day devoted to industrial presentations (in a single track), and two days of academic presentations (in two parallel tracks). In addition to paper presentations and related discussions, the program included two keynote talks by Barbara Paech and Klaas-Jan Stol; a Poster & Tools session organised by Sallam Abualhaija and Oliver Karras; a Journal Early-Feedback track, organized by Paola Spoletini and Daniel Amyot; and awards to recognize the best contributions in various categories. On the Monday before the conference, four co-located events were held:

- NLP4RE: 6th Workshop on Natural Language Processing for Requirements Engineering, organized by Sallam Abualhaija, Andreas Vogelsang and Gouri Deshpande;
- RE4AI: 4th International Workshop on Requirements Engineering for Artificial Intelligence, organized by Renata Guizzardi, Jennifer Horkoff, Anna Perini and Angelo Susi;
- ViVA RE!: 1st Workshop on Virtues and Values in Requirements Engineering, organized by Alexander Rachmann and Jens Gulden;
- REFrame: 1st Workshop on Requirements Engineering Frameworks, organized by Andrea Wohlgemuth, Anne Hess and Samuel Fricker;
- REFSQ Doctoral Symposium, organized by Fabiano Dalpiaz and Ana Moreira.

The proceedings of the co-located events and the Poster & Tools track are published in a separate volume via CEUR. We would like to thank all members of the Requirements Engineering community who prepared a contribution for REFSQ 2023: there would be no progress in our discipline without the talent, intelligence and effort that so many brilliant researchers dedicated to the field. We would also like to thank members of the Program Committee and additional reviewers for their invaluable contribution to the selection process. Special thanks are due to all the colleagues that served in various distinguished roles in the organization of REFSQ 2023; your help in assembling a rich program has been invaluable:

- The REFSQ Steering Committee has provided excellent support and guidance throughout the process;
- The previous PC chairs, who happily shared their experiences;
- The Local Organizers Carles Farré and Carme Quer;
- The Steering Committee Chair Anna Perini and Vice-Chair Fabiano Dalpiaz, and
- The head of the Background Organization, Xavier Franch, for making our regular organizational meetings so enjoyable that we almost looked forward to each subsequent one with pleasurable anticipation.

Last but not least, we would like to thank you, the reader. You are the reason for this volume to exist. We hope you will find its contents interesting, useful, stimulating and inspirational.

February 2023

Alessio Ferrari  
Birgit Penzenstadler

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