

Preface: First Workshop on Requirements Engineering Frameworks (REFrame'23) – “Human Values in RE”

Andrea Wohlgemuth¹, Anne Hess² and Samuel A. Fricker³

¹ Swisslog GmbH, Dortmund, Germany

² Fraunhofer IESE, Kaiserslautern, Germany

³ University of Applied Sciences and Arts Northwestern Switzerland, Switzerland

Abstract

The REFrame workshop aims to bring together a diversity of people who are interested in reflecting on and discussing current research, challenges, and experiences related to the science-driven development and industrially relevant application of frameworks for requirements engineering. Moreover, the workshop is intended to identify future research topics and collaboration possibilities – even beyond the scope of the workshop – with the ultimate goal of collaboratively building and publishing a compendium of frameworks (respectively best practices) that can be used and applied when it comes to solving RE-specific challenges. As a special issue of this first edition, the workshop takes up the main theme of REFSQ'23, “Human Values in RE”.

Keywords

Requirements engineering, frameworks, best practices

1. Motivation and Objectives

The motivation of the “REFrame” workshop is to bring together a diversity of people who are interested in discussing practical and theoretical experiences with frameworks in requirements engineering (RE).

We understand a framework as a *structure for a topic area that collects elements of the topic area and relates them to each other. A framework is semi-complete and must be supplemented and/or adapted specifically for a concrete application context.*

Multiple frameworks have been created and published that can be used in the RE context. Some are commercial products (like Volere or Scrum) with high visibility in academia and industry. Others have been published as part of academic research with low visibility. However, the visibility of these RE frameworks is not equivalent to the value these frameworks could provide for the RE community.

The above definition of the term “framework” and the overall idea for this workshop were proposed and discussed in the working group “Software Requirements Frameworks,” which is associated with the “Special Interest Group RE” of the German Informatics Society (GI) [1]. One of the core objectives of this working group is to investigate, prepare, and discuss the state of the art / state of the practice related to frameworks in RE to ultimately derive practical instructions and guidelines for the RE community from this consolidated knowledge [2].

To support this endeavour, the working group would like to invite others to join the dialogue and actively contribute to the discussion and publication of the aforementioned knowledge and experiences related to RE frameworks. The overall aim is to aggregate such knowledge in a well-indexed compendium that can be used to make RE frameworks easily available to the RE community.

¹A. Ferrari, B. Penzenstadler, I. Hadar, S. Oyediji, S. Abualhaija, A. Vogelsang, G. Deshpande, A. Rachmann, J. Gulden, A. Wohlgemuth, A. Hess, S. Fricker, R. Guizzardi, J. Horkoff, A. Perini, A. Susi, O. Karras, A. Moreira, F. Dalpiaz, P. Spoletini, D. Amyot. Joint Proceedings of REFSQ-2023 Workshops, Doctoral Symposium, Posters /& Tools Track, and Journal Early Feedback Track. Co-located with REFSQ 2023. Barcelona, Catalunya, Spain, April 17, 2023.
EMAIL: andrea.wohlgemuth@swisslog.com; anne.hess@iese.fraunhofer.de; samuel.fricker@fhnw.ch

In line with the main theme of REFSQ'23, the workshop focuses on frameworks addressing “Human Values in RE” - a highly promising and relevant topic for the RE community [3].

The workshop received five submissions comprising four papers and one presentation. Each submission was independently reviewed and discussed by three program committee members and at least one organising chair. They were evaluated and selected according to their quality and suitability for the workshop theme. All five submissions were well in scope for the workshop and met the quality threshold, thus were accepted.

The accepted submissions contribute well to the development of a compendium for requirements engineering frameworks. The submissions covered the following topics: (1) research ideas on extending agent-oriented modelling (such as the i*framework) on aspects like human values and emotions, (2) ethics challenges in building trustworthy self-adaptive systems, (3) an approach that supports the elicitation, modelling, and analysis of requirements related to user emotions, (4) research towards a framework for understanding context in requirements engineering, and (5) the proposed use of an evolved version of the “Sustainability Awareness Framework (SusAF)” framework as a de-facto standard for use in requirements engineering projects.

Besides the presentations and discussions of the accepted papers, the workshop program will be framed with two invited keynotes that offer a strong human values focus to the workshop. The first one is offered by Dr. Amel Bennaceur on human values in requirements engineering. The second one is offered by Dr. Başak Aydemir on ethics-aware software engineering.

The program will be rounded off by an interactive group discussion on the topic “Towards RE-Framework for Human Values - Synthesis, Roadmap and Future Collaboration.”

2. Acknowledgements

We thank all Program Committee members for their support and dedication regarding the valuable and timely paper / presentation reviews and online discussions. In particular, we would like to thank Andrea Herrmann, Andreas Birk, Daniel Berry, Dirk Janzen, Elda Paja, Eric Knauss, Erik Kamsties, Fabiano Dalpiaz, Farnaz Fotrousi, Heinrich Dreier, Martin Glinz, Norbert Seyff, and Paola Spoletini.

We are also very grateful to all the authors who submitted their thoughts, ideas, and experiences to the workshop. Last but not least, thanks to the REFSQ'23 Workshop Chairs Irit Hadar and Shola Oyedeji, as well as the REFSQ'23 program chairs Alessio Ferrari and Birgit Penzenstadtler for their timely and great assistance.

We look forward to the workshop in Barcelona and hope you will find the workshop results and proceedings inspiring and valuable.

3. References

- [1] <https://ak-reqframe.gi.de/> (last access 15 March 2023)
- [2] A. Birk, H. Dreyer, A. Herrmann, A. Hess, D. Janzen, A. Wohlgemuth, Bericht des Arbeitskreises “Software Requirements Frameworks”. In: *Softwaretechnik-Trends* 43:3, Aug. 2022.
- [3] B. Nuseibeh, Requirements We Live By. In: 2019 IEEE 27th International Requirements Engineering Conference (RE), 2019, pp. 1-1, doi: 10.1109/RE.2019.00009.