

Welcome to the 8th International Workshop on Empirical Requirements Engineering (EmpiRE 2023)

Alessandro Marchetto
University of Trento, Italy
alessandro.marchetto@unitn.it

Vincenzo Gervasi
University of Pisa, Italy
vincenzo.gervasi@unipi.it

Maya Daneva
University of Twente, The Netherlands
m.daneva@utwente.nl

Abstract—A message from the workshop chairs of the 8th International Workshop on Empirical Requirements Engineering, co-located with the 31st IEEE International Requirements Engineering Conference (RE 2023) Hannover, Germany, September 4–8, 2023.

I. WORKSHOP AIMS AND HISTORY

The long-term objective of the Workshop series on Empirical Requirements Engineering (EmpiRE) is to increase the cross-fertilization of Empirical Software Engineering (ESE) methods and Requirements Engineering (RE) by actively encouraging the exchange of ideas to understand why and how the empirical methods from ESE (and potentially other disciplines) can help to assess and improve existing or novel approaches in RE.

EmpiRE 2023 builds on the success of seven previous editions, which were held in conjunction with RE'18 (Banff), RE'17 (Lisbon), RE'15 (Ottawa), RE'14 (Karlskrona), RE'13 (Rio de Janeiro), RE'12 (Chicago), RE'11 (Trento). EmpiRE grew upon the community's efforts and results of the CERE (Comparative Evaluation in Requirements Engineering) workshop series, which were held in conjunction with RE in 2003, 2004, 2006, 2007. With a strong emphasis on practical evaluation, but more comprehensive goals, EmpiRE is considered CERE's spiritual successor — thus marking the 20th anniversary since the inception of the series.

The workshop has always been characterized by its focus on personal interaction and hands-on work, in addition to scientific presentations. Hence, the consequences of the COVID pandemic were particularly felt, with a three years hiatus that Empire 2023 is now closing.

The goal of this 8th edition is thus to shape the next phase of cross-fertilization of RE and ESE, specifically: (i) to open up the interdisciplinary debate on the steadily moving frontiers in empirical RE, and (ii) to extend the network of RE and ESE researchers designing and conducting empirical studies in RE, which in turn will lead to the cross-fertilization between RE and ESE.

II. PROGRAM SELECTION

The Call for papers¹ solicited contributions applying empirical research methods to RE problems, and identified four spe-

¹<https://sites.google.com/unitn.it/empire2023/call-for-papers>

cific domains as of more immediate interest, in consideration of contemporary developments: RE for Artificial Intelligence, Machine and Deep Learning, Recommender Systems, and Natural Language Processing. The reader will find that many of these themes were also the subject of other workshops as well as of many contributions in the main RE conference. The special focus of EmpiRE lies however in the application of empirical approaches to problem definition, research method, solution and validation of the proposed contributions.

In response to the Call, six papers were submitted for consideration (five full-length technical contributions and one short position paper). Each submission was first vetted by the Workshop Chairs to ensure that it was in scope for the workshop, and then independently reviewed by three members of the Program Committee. Unless an unanimous recommendation was immediately reached, an online discussion ensued, resulting in a final decision. In the end, four papers were accepted to be presented at the workshop, and are now included in these proceedings:

- *Exploring Human Values in AI Systems: Empirical Analysis of Amazon Alexa* by Rifat Ara Shams, Muneera Bano, Didar Zowghi, Qinghua Lu and Jon Whittle.
- *Can Videos as a By-Product of GUI Testing Help Developers Understand GUI Tests?* by Jianwei Shi, Oliver Karras, Martin Obaidi and Malvin Tandun.
- *What's next in my backlog? Time series analysis of user reviews* by Gøran H. Strønstad, Ilias Gerostathopoulos and Emitzá Guzmán.
- *The Square of Values for Modeling Human Values in Requirements Engineering* by Jens Gulden and Alexander Rachmann.

A common theme emerges clearly, namely the importance of considering the human element in empirical research. All four papers investigate the role of humans, of their beliefs and values, of their reactions, of their potential for providing valuable input to analysts and developers. While this was certainly not planned for and not even expected, we believe it to be a distinctive feature and a good characterization of where the research interests of the EmpiRE community are heading to.

III. INVITED TALK

The program is completed by an invited talk by Sjaak Brinkkemper on *Empirical Requirements Engineering for Smart-Life Applications: Experiences with Automated Medical Reporting in the Care2Report System*. Building on Sjaak's lifelong interest in metrics and methods engineering, the talk reports on the lessons learned from the field deployment of a sensitive application.

IV. ORGANIZATION

We could not imagine organizing the workshop without the help and expertise of the members of the Program Committee, which in the spirit of scientific pursuit found the time to squeeze a few more reviews and discussions in their already busy work schedules:

- Raian Ali, Hamad Bin Khalifa University, Qatar
- Dan Berry, University of Waterloo, Canada
- Faiza A. Bukhsh, University of Twente, The Netherlands
- Fabiano Dalpiaz, Utrecht University, The Netherlands
- Xavier Franch, Universitat Politècnica de Catalunya, Spain
- Andrea Herrmann, Herrmann & Ehrlich, Germany
- Irum Inayat, LERO, Ireland
- Mohamad Kassab, Penn State University, USA
- Nan Niu, University of Cincinnati, USA
- Oscar Pastor, Universidad Politécnica de Valencia, Spain
- Preethu Rose, RE Group - TATA Research Development and Design Center, India
- Angelo Susi, FBK, Italy
- Didar Zowghi, CSIRO's Data61, Australia

To all of them go our sincerest thanks. We would also like to thank the RE'23 Workshop Co-Chairs, Anne Hess and Elda Paja, and the Proceedings Chair, Nan Niu, for their support throughout the organization of the workshop.

We hope you will enjoy the workshop and the reading of the workshop proceedings.