RoSE 2023

Fifth International Workshop on Robotics Software Engineering

Co-located with the 45th International Conference on Software Engineering (ICSE 2023) May 2023, Melbourne, Australia https://rose-workshops.github.io/rose2023

Workshop organizers

Andreas Angerer XITASO GmbH, DE Federico Ciccozzi, Mälardalen University, SE Ivano Malavolta, Vrije Univversiteit Amsterdam, NL Christopher S. Timperley, Carnegie Mellon University, USA

Program Committee (invited)

Alwin Hoffmann, XITASO GmbH, Germany Andreas Wortmann, RWTH Aachen University, Germany Bradley Schmerl, Carnegie Mellon University, USA Carlos Hernandez Corbato, TU Delft, The Netherlands Charles Lesire-Cabaniols, French Aerospace lab (ONERA), France

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Patrizio Pelliccione, Gran Sasso Science Institute, Italy Ricardo Sanz, Universidad Politecnica de Madrid, Spain Robert Bocchino, Jet Propulsion Laboratory, California Institute of Technology, USA

Rogardt Heldal, HLV, Norway

Sebastian Wrede, CoR-Lab, Bielefeld University, Germany Simos Gerasimou, York University, UK Ulrik Schultz, University of Southern Denmark, Denmark Increasingly, challenging domains employ robotic applications. Yet, Robotics still is one of the most challenging domains for software engineering. Deploying robotics applications requires integrating solutions from experts of various domains, including navigation, path planning, manipulation, localization, human-robot interaction, etc. Integration of modules contributed by respective domain experts is one of the key challenges in engineering software-centric systems, yet only one of the cross-cutting software concerns crucial to robotics. As robots often operate in dynamic, partially observable environments additional challenges include adaptability, robustness, safety, and security.

The goal of RoSE 2023 is to bring together researchers from participating domains with practitioners to identify new frontiers in robotics software engineering, discuss challenges raised by real-world applications, and transfer latest insights from research to industry. RoSE 2023 will solicit contributions from both academic and industrial participants, thus fostering active synergy between the two communities.

Prospective participants are invited to submit:

- research papers presenting novel contributions on advancing software engineering in robotics (max. 8 pages);
- challenge showcase papers describing robotics challenges considered insufficiently addressed from an industry perspective (max. 6 pages);
- lessons learned papers describing lessons learned in the collaboration between the two communities of SE and robotics (max. 6 pages);
- vision papers on the future of SE in robotics (max. 4 pages);
- tool & project papers on SE in robotics (max. 4 pages).

Workshop papers must follow the ICSE 2023 Format and Submission Guidelines, but will use a single blind submission process. All submitted papers will be reviewed on the basis of technical quality, relevance, significance, and clarity by the program committee.

Submissions must be done electronically in PDF format through EasyChair at https://easychair.org/conferences/?conf=rose2023.

Accepted papers will become part of the workshop proceedings.

Important Dates

Submission deadline: 13 January 2023

Notification of acceptance: 24 February 2023

• Camera-ready version: 17 March 2023