

# RoSE 2023

## Fifth International Workshop on Robotics Software Engineering

Co-located with the 45th 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 Universiteit 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*  
*Claudio Menghi, McMaster University, Canada*  
*Daniel Sykes, Ocado Technology, UK*  
*Darko Bozhinoski, Université libre de Bruxelles, Belgium*  
*David Garlan, Carnegie Mellon University, USA*  
*Davide Brugalì, Università degli Studi di Bergamo, Italy*  
*Davide Di Ruscio, Università degli Studi dell'Aquila, Italy*  
*Ettore Merlo, Ecole Polytechnique of Montreal, Canada*  
*Floris Erich, National Institute of Advanced Industrial Science and Technology, Japan*  
*Holger Giese, Hasso Plattner Institute at the University of Potsdam, Germany*  
*Jan Broenink, University of Twente, The Netherlands*  
*Javier Camara, University of York, UK*  
*Jesús Martínez, Universidad de Málaga, Spain*  
*Juergen Dingel, Queen's University, Canada*  
*Michel Albonico, Technological Federal University of Paraná, Brasil*  
*Moritz Tenorth, Magazino GmbH, Germany*  
*Nadia Hammoudeh Garcia, Fraunhofer Institute for Manufacturing Engineering and Automation IPA, Germany*  
*Nico Hochgeschwender, University of Applied Sciences Bonn-Rhein-Sieg, Germany*  
*Patrizio Pelliccione, Gran Sasso Science Institute, Italy*  
*Ricardo Sanz, Universidad Politécnica 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>.

The official publication date is the date the proceedings are made available in the ACM or IEEE Digital Libraries. This date may be up to two weeks prior to the first day of ICSE 2023. The official publication date affects the deadline for any patent filings related to published work. Purchases of additional pages in the proceedings is not allowed.

### Important Dates

- Submission deadline: 13 January 2023
- Notification of acceptance: 24 February 2023
- Camera-ready version: 17 March 2023