RoSE 2021

Third International Workshop on Robotics Software Engineering

Co-located with the 43rd International Conference on Software Engineering (ICSE 2021)
May 23 – 29, 2021 — Virtual
https://rose-workshops.github.io/rose2021/

Workshop organizers

- *Andreas Angerer XITASO GmbH, DE*
- *Federico Ciccozzi, Mälardalen University, SE*
- *Ivano Malavolta, Vrije Univversiteit Amsterdam, NL*
- *Andreas Wortmann, RWTH Aachen University, DE*

Program Committee (invited)

- *Alwin Hoffmann, University of Augsburg, Germany*
- *Andrzej Wasowski, IT University of Copenhagen, Denmark*
- *Arne Nordmann, Robert Bosch GmbH, Germany*
- *Bradley Schmerl, Carnegie Mellon University, USA*
- *Carlos Hernandez Corbato, TU Delft, The Netherlands*
- *Charles Lesire-Cabaniols, French Aerospace lab (ONERA), France*
- *Daniel Sykes, Ocado Technology, UK*
- *Darko Bozhinoski, TU Delft, The Netherlands*
- *David Garlan, Carnegie Mellon University, USA*
- *Davide Brugali, 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*
- *Francesco Ferro, Pal Robotics, Spain*
- *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*
- *John-Paul Ore, University of Nebraska-Lincoln, USA*
- *Juergen Dingel, Queen's University, Canada*
- *Lorenzo Natale, Istituto Italiano di Tecnologia (IIT), Italy*
- *Michel Albonico, Vrije Universiteit Amsterdam, The Netherlands*
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- *Ricardo Sanz, Universidad Politecnica de Madrid, Spain*
- *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 2021 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 2021 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 future of software engineering in robotics (max. 4 pages);
- tool & project papers on software engineering in robotics (max. 4 pages).
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Workshop papers must follow the ICSE 2021 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. All workshop papers should be submitted electronically in PDF format through the EasyChair workshop website at https://easychair.org/conferences/?conf=rose2021. Accepted papers will become part of the workshop proceedings.

The official publication date of the workshop proceedings is the date the proceedings are made available by IEEE. This date may be up to two weeks prior to the first day of ICSE 2021. The official publication date affects the deadline for any patent filings related to published work.

Important Dates

- Submission deadline: 12 January 2021
- Notification of acceptance: 22 February 2021
- Camera-ready version: 12 March 2021