RoSE 2022

Fourth International Workshop on Robotics Software Engineering

Co-located with the 44th International Conference on Software Engineering (ICSE 2022)
May 21-29, 2022, Pittsburgh, USA
https://rose-workshops.github.io/rose2022/

Workshop organizers

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

Program Committee (invited)

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- *Andrzej Wasowski, IT University of Copenhagen, DK*
- *Arne Nordmann, Robert Bosch GmbH, DE*
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- *David Garlan, Carnegie Mellon University, USA*
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- *Davide Di Ruscio, Università degli Studi dell'Aquila, IT*
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- *Floris Erich, National Institute of Advanced Industrial Science and Technology, JP*
- *Francesco Ferro, Pal Robotics, ES*
- *Holger Giese, Hasso Plattner Institute at the University of Potsdam, DE*
- *Jan Broenink, University of Twente, NL*
- *Jana Tumova, KTH Royal Institute of Technology, SE*
- *Javier Camara, University of York, UK*
- *Jesús Martínez, Universidad de Málaga, ES*
- *John-Paul Ore, University of Nebraska-Lincoln, USA*
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- *Ricardo Sanz, Universidad Politecnica de Madrid, ES*
- *Rogardt Heldal, HLV, NO*
- *Sebastian Wrede, CoR-Lab, Bielefeld University, DE*
- *Sebastiano Panichella, Zurich University of Applied Science (ZHAW), DE*
- *Simos Gerasimou, York University, UK*
- *Ulrik Schultz, University of Southern Denmark, DK*
- *Trenton Tabor, Carnegie Mellon University, USA*

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 2022 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 2022 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 2022 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=rose2022. Accepted papers will become part of the workshop proceedings.

Important Dates

- Submission deadline: 14 January 2022
- Notification of acceptance: 25 February 2022
- Camera-ready version: 18 March 2022