TAROS 2025

Towards Autonomous Robotic Systems

Third Call for Papers and Posters

Paper abstract deadline: ~~21st February 2025~~ 21st March 2025
Paper submission deadline: ~~28th February 2025~~ 28th March 2025
Notification: 19th May 2025

Updates:
- Deadline extended to 28th of March 2025
- Special issue of Elsevier's *Robotics and Autonomous Systems* for TAROS 2025 confirmed
- Publication of LNAI proceedings confirmed
- Stellar Programme Committee already assembled

Website: https://taros-conference.org/
Submission: https://easychair.org/conferences/?conf=taros2025
Contact: taros2025@easychair.org

TAROS is the longest-running UK-hosted international conference on robotics and autonomous systems, aimed at the presentation and discussion of the latest results and methods in autonomous robotics research and applications. In 2025, the RoboStar (robostar.cs.york.ac.uk) centre of excellence on Software Engineering for Robotics, in collaboration with colleagues at the Universities of York and Leeds, are organising TAROS at the University of York, from the 20th to the 22nd of August.

TAROS 2025 invites full papers, short papers, and posters for presentation at the conference. This year there will be a special session on Software Engineering for Robotics. The conference proceedings will be published in the Springer Lecture Notes in Artificial Intelligence (LNAI) series. **Authors of selected papers will be invited to submit an extended version of their papers to a special issue of Elsevier's *Robotics and Autonomous Systems* journal dedicated to TAROS 2025.**

Full papers are invited from researchers at any stage in their career but should present significant findings and advances in robotics research; more preliminary work would be better suited to a short paper or poster submission. Full papers (up to **12 pages** in LNCS format, excluding references) and short papers (between **4 and 6 pages**, excluding references) will be

accepted for oral presentation. Posters will be accepted for display at the conference. All papers and posters will be subjected to a rigorous peer review process, supported by a program committee of more than 50 world-leading robotics researchers.

Contributions are sought in all areas relevant to the overall goal of the conference, including, but not limited to the following topics:

- Autonomous robots
- Assistive, service, and personal robotics
- Aerial robots (unmanned- and micro-air vehicles) space and planetary robotics
- Medical robotics, robots for surgery, and intelligent prosthetics
- Humanoid and walking robots
- Soft and flexible robots
- Swarm, collective, and field robotics
- Modular reconfigurable robots
- Human-Robot Interaction
- Multimodal interfaces
- Navigation, localization, map building, and path planning,
- Analysis of robot-environment interaction
- Applications development, hardware issues, devices, and techniques
- Advanced sensors and actuators
- Advanced materials and techniques
- Autonomous vehicles
- Bio-mimetic, bio-inspired and bio-hybrid robotic systems
- Evolutionary, cognitive, and developmental robotics
- Robot communication and language
- Ethical and societal issues in robotics
- Robots in education, arts, and entertainment
- Safety, verification, and validation for robotic applications
- Learning and adaptation
- Long-term interaction and operation
- Modelling and analysis

This list of topics is not exhaustive. Due to the interdisciplinary nature of the conference, relevant contributions from other fields will also be welcome.

Software Engineering for Robotics Special Session

We invite submissions of papers on Software Engineering for Robotics for presentation in the Software Engineering for Robotics Special Session of TAROS 2025.

Scope

This session is devoted to original research papers on techniques, applications, industrial case studies, and experience reports connected to the design and deployment of software for robotic systems. Emphasis is given to all aspects of modelling, simulation, and implementation for the validation and verification of robotic systems.

Topics of Interest

In particular, the topics of interest include but are not limited to
- Domain-specific languages for robotics
- Verification of robotic applications: simulation, testing, and deployment
- Requirements analysis and validation of robotic applications
- Hybrid, probabilistic, or stochastic modelling and analysis of robotics applications
- Approaches to safety and security of robotic applications
- Software development processes and methods for robotics
- Robotic system maintenance, adaptation, and evolution

Key Dates for Authors

General Track & Software Engineering for Robotics Special Session

Abstract submission deadline: March 21, 2025
Paper submission deadline: March 28, 2025
Notification: May 19, 2025
Final submission: June 2, 2025
Conference: August 20-22, 2025

Poster Track

Poster submission deadline: May 5, 2025
Notification: July 11, 2025
Final submission: August 1, 2025
Conference: August 20-22, 2025

Instructions for Authors

Presentation Format
Oral presentations: 15-minute time slot – 12-minute presentation followed by a 3-minute question and answer session.

Paper Format
Paper submissions must be in Springer page format (LNCS). Please refer to the style files and templates, with full formatting instructions **available for download here**.

- Full Paper Manuscripts are limited to twelve (12) Springer format pages, exclusive of references.
- Short Paper Manuscripts are limited to six (6) Springer format pages, with a minimum of 4 pages, exclusive of references.

Full papers and short papers will be presented as talks with the option of an additional poster. All papers will appear in the printed proceedings.
- [LaTeX Template](#)
- [Word Template](#)

Poster Format
Poster presentation: Poster in portrait orientation fitting a board of 1210x2100mm (A1 or A0 recommended)

All accepted poster track submissions will appear on the TAROS 2025 website.

Programme Committee

Kaspar Althoefer, Queen Mary University of London
David Anisi, Norwegian University of Life Sciences
Farshad Arvin, Durham University
Philip Breedon, Nottingham Trent university
Giuseppe Carbone, University of Calabria
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