

Call for Papers - Track 07 Intelligent Robots and Systems

Track chairs

Cristian Mahulea¹ - Universidad de Zaragoza, Spain
Branko Miloradović² - Mälardalen University, Sweden
¹cmahulea@unizar.es, ²branko.miloradovic@mdu.se

FOCUS. This track brings together researchers and practitioners to present advances and practical experiences in intelligent robotic and automation systems for real-world applications, including robot systems and prototypes, robot programming, AI-based control, perception, and sensor data processing, intelligent embedded systems, and benchmarking and usability studies, with an emphasis on validated, robust, and industrially relevant solutions.

TOPICS

- ❖ SLAM, navigation, motion planning, and collision avoidance
- ❖ Perception, sensor fusion, vision systems, and environment understanding
- ❖ Robot learning, deep learning, and data-driven autonomy
- ❖ Multi-agent, cooperative, collaborative, and networked robotics
- ❖ Edge/cloud robotics and integrated intelligent systems
- ❖ Robot programming, control, and supervision
- ❖ Robotic arms, mobile manipulators, and heterogeneous platforms
- ❖ Simulation, digital twins, and virtual testing
- ❖ Human–robot interaction, usability, and safety
- ❖ Resilient autonomy and failure recovery
- ❖ Advanced applications of autonomous robots
- ❖ Sustainable robotics, circular economy, and lifecycle-aware applications
- ❖ Training and education in robotics
- ❖ Multi-Robot Planning and Scheduling
- ❖ Path and Task Planning

- ❖ **AIM.** The aim of the conference is to bring together the international research and industrial communities to present state-of-the-art research results, share novel ideas and engineering breakthroughs, and discuss current challenges and future directions in technology and innovation within the broad domain of automation, with a particular focus on industrial and factory automation.

- ❖ **CONFERENCE FORMAT.** The conference will comprise multi-track sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations, as well as work-in-progress (WiP) and industry practice sessions.

❖ AUTHOR'S SCHEDULE (2026)

❖ Regular and special sessions papers

Submission deadline April 19
 Acceptance notification May 25
 Deadline for final manuscripts July 4

❖ Work-in-progress/Industry practice papers

Submission deadline May 31
 Acceptance notification June 19
 Deadline for final manuscripts July 4

Track Program Committee

- ❖ Mirgita Frasheri, Aarhus University, Denmark
- ❖ Milica Petrović, University of Belgrade, Faculty of Mechanical Engineering, Serbia
- ❖ Anders Lager, ABB Robotics Sweden AB, Sweden
- ❖ Pablo Krupa, IMT School for Advanced Studies, Italy
- ❖ Gianluca Aguzzi, University of Bologna, Italy
- ❖ Andriy Sarabakha, Aarhus University, Denmark
- ❖ Emma Delgado, University of Vigo, Spain
- ❖ Marco Faroni, Politecnico di Milano, Italy
- ❖ Antoni Grau, Technical University of Catalonia (UPC), Spain
- ❖ Robert Harrison, WMG - University of Warwick, United Kingdom
- ❖ Sofia Hustiu, "Gheorghe Asachi" Technical University of Iași, Romania
- ❖ Pedro Neto, Universidade de Coimbra, Portugal
- ❖ Alberto Ortiz, Institute of Artificial Intelligence, University of the Balearic Islands, Spain
- ❖ Gianluca Palli, University of Bologna, Italy
- ❖ Nicola Pedrocchi, CNR-STIIMA, Italy
- ❖ David Portugal, Institute of Systems and Robotics, University of Coimbra, Portugal
- ❖ Christian Schlegel, University of Applied Sciences Ulm, Germany
- ❖ Marina Indri, Politecnico di Torino, Italy
- ❖ Andrea Bonci, Marche Polytechnic University, Italy
- ❖ Raul Suarez, Technical University of Catalonia (UPC), Spain
- ❖ Rabah Ammour, Aix-Marseille University, France
- ❖ Niklas Persson, Mälardalen University, Sweden
- ❖ Alessio Caporali, University of Bologna, Italy
- ❖ Roberto Meattini, University of Bologna, Italy