ETFA 2025

Porto Portugal
9-12 September

30th IEEE International Conference on Emerging Technologies and Factory Automation

Call for Papers - Track 7
Intelligent Robots and Systems

Track chairs

Andry Maykol Pinto [§] - University of Porto, Portugal
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❖ **FOCUS**. The aim of the track is to gather researchers and practitioners to report on recent achievements and on requirements in the development of real-world intelligent robots and systems, including robot prototypes, robot programming, robotics and artificial intelligence applications, sensor data processing in robotics and intelligent embedded systems, as well as on benchmarking and usability studies.

❖ **TOPICS**

- ❖ Environment Description, Map Building and Localization, SLAM
- ❖ Navigation incl. Collision Avoidance and Path Planning
- ❖ Perception Robotics
- ❖ Robot Learning and Deep Learning
- ❖ Advanced Sensors and Vision Systems for Robotics
- ❖ Multi-Agent Systems, Cooperative and Collaborative Robotics
- ❖ Network Robotics
- ❖ Edge computing and Integrated Intelligence
- ❖ Robot Programming and Control Architecture Design
- ❖ Arms and Mobile Manipulators
- ❖ Simulation for Robotics
- ❖ Training and Education in Robotics
- ❖ Human-Robot Interaction
- ❖ Supervision, Planning and Failure Recovery
- ❖ Advanced Applications of Autonomous Robots
- ❖ Sustainable Robotics and Applications (e.g. inspection, intervention and repair of infrastructures).
- ❖ Circular economy in Robotics

Track Program Committee

- ❖ Yolanda Bolea, Technical University of Catalonia,Spain
- ❖ Raul Campilho, ISEP, Portugal
- ❖ Daniel Campos, INESC TEC, Portugal
- ❖ Rafael Claro, INESC TEC, Portugal
- ❖ Paulo Costa, University of Porto, Portugal
- ❖ Ricardo Cruz, University of Porto, Portugal
- ❖ Francois Devecchi, Exail, France
- ❖ Inês Domingues, ISEC, Portugal
- ❖ José Gonçalves, IPB, Portugal
- ❖ Edmundo Guerra, Technical University of Catalonia,Spain
- ❖ Gianluca Ippoliti, Università Politecnica delle Marche, Italy
- ❖ Seiichiro Katsura, Keio University, Japan
- ❖ Pedro Leite, INESC TEC, Portugal
- ❖ António Mendes Lopes, University of Porto, Portugal
- ❖ Rodrigo Munguia, University of Guadalajara, Mexico
- ❖ Eden Mustafa, Heriot-Watt University, United Kingdom
- ❖ António J Neves, University of Aveiro, Portugal
- ❖ David Portugal, University of Coimbra, Portugal
- ❖ Mariorosario Prist, Università Politecnica delle Marche, Italy
- ❖ Christian Schlegel, Hochschule Ulm, Germany
- ❖ Tomoyuki Shimono, Yokohama National University, Japan
- ❖ Holger Voos, University of Luxembourg, Luxembourg

❖ **AIM.** The aim of the conference is to bring together the international community to present the latest research results, share new ideas and engineering breakthroughs, and discuss state-of-the-art challenges and future directions in technology and innovation in the broad domain of Automation with a 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 (2025)**

❖Regular and special sessions papers
- Submission deadline .... April 18
- Acceptance notification .... May 23
- Deadline for final manuscripts .... July 4

❖Work-in-progress/Industry practice papers
- Submission deadline .... May 30
- Acceptance notification .... June 20
- Deadline for final manuscripts .... July 4

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