

ETFA 2025

Porto Portugal

9-12 September

30th IEEE International Conference on Emerging Technologies and Factory Automation

Call for Papers - Track 9

Complex Automation Systems and Systems Engineering

Track chairs

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❖ **FOCUS.** The track is focused on the system level design of complex technical systems, such as industrial Cyber Physical Systems, towards attaining functional requirements, controlled behavior and predictable performance. It focusses on the multi-disciplinary and multi-model nature of the related engineering tasks.

❖ TOPICS

- ❖ Systems Engineering, Systems-of-Systems Engineering & Cyber-Physical Production Systems (CPPS)
- ❖ Life Cycle Perspective of CPPS and Model Driven Engineering
- ❖ Engineering Process Management and Humans in Engineering
- ❖ Managing Structural and Dynamic Complexity
- ❖ Systems Architecture supporting complex automation system design including Humans in the Loop
- ❖ Decision-making for Complex Systems
- ❖ Cloud/Edge/Fog Computing in Automation
- ❖ Enterprise Architecture Integration
- ❖ Modelling & Simulation & Management – Digital Twins, Digital Shadows, Asset Administration Shells
- ❖ Large-Scale System Integration, Verification and Validation (IVV)
- ❖ Modularity, Composability and Complexity in Autonomous Systems
- ❖ Case Studies and application reports from factory and process automation, automotive applications, transportation systems, district and urban automation and systems, energy systems, eHealth automation systems

❖ **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

Track Program Committee

- ❖ Christos Alexakos, ISI, Greece
- ❖ Stefan Biff, TU Wien, Austria
- ❖ Christoph Binder, FH Salzburg, Austria
- ❖ Giuseppe Franze, Università della Calabria, Italy
- ❖ Christos Koulamas, ISI, Greece
- ❖ Stefan Huber, FH Salzburg, Austria
- ❖ David Hoffmann, Otto-v.-Guericke University Magdeburg, Germany
- ❖ Martin Langosch, BMW, Germany
- ❖ Carmen Listl, BMW, Germany
- ❖ Arndt Lüder, Otto-v.-Guericke University Magdeburg, Germany
- ❖ Christian Neureiter, FH Salzburg, Austria
- ❖ Natalie Nowacki, Volkswagen, Germany
- ❖ Thomas Strasser, Austrian Institute of Technology, Austria
- ❖ Sven Tomforde, Christian-Albrechts-Universität zu Kiel, Germany
- ❖ Manuel Wimmer, Johannes Kepler Universität Linz, Austria
- ❖ Alois Zoitl, Johannes Kepler Universität Linz, Austria