

# ETFA 2025

## Porto

Portugal  
9-12 September

30<sup>th</sup> IEEE International Conference on Emerging Technologies and Factory Automation

### Call for Papers - Track 10 Artificial Intelligence for Cyber Physical Systems in Automation

#### Track Chairs

**Stefano Scanzio** § - CNR-IEIT, Italy  
**Lukasz Wisniewski** \* - inIT / TH-OWL, Germany  
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- ❖ **FOCUS.** The track is focused on theoretical formulations, technical developments, practical applications, methods and case studies that leverage Artificial Intelligence (AI), Machine Learning (ML), Data Analytics, AI/ML-based Technologies, and Emerging Technologies for the automation and optimization of Cyber-Physical Systems in smart factory settings.
- ❖ **TOPICS**
  - ❖ Self-Configuration, Self-Adaption and Self-Organization for Smart Factories
  - ❖ Smart Cities, Smart Buildings and Smart Energy enhanced by AI
  - ❖ Grey-box Machine Learning
  - ❖ Real-time Implementation of AI in Automation
  - ❖ Knowledge Representation and Ontologies
  - ❖ AI-based Approaches to Support Security in Cyber Physical Systems
  - ❖ Unsupervised Learning and Latent Representations
  - ❖ Networked Adaptive Systems and AI-based Network Digital Twins
  - ❖ AI Powered Intelligent Interfaces to Smart Distributed Systems
  - ❖ Industrial Conversational Agents
  - ❖ Machine Learning and Deep Learning for Production
  - ❖ Algorithms for Predictive Maintenance, Diagnosis, and Repair
  - ❖ Explainable and Trustworthy AI in Industrial Cyber-Physical Systems
  - ❖ Natural Language Processing Applications in Automation
  - ❖ Dependability of Cyber-Physical 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

- ❖ Abhilash Thekkilakattil, *Scania CV, Sweden*
- ❖ Alexander Diedrich, *Helmut-Schmidt-University, Hamburg, Germany*
- ❖ Andrea Bonci, *Univ delle Marche, Italy*
- ❖ Andrzej Ozadowicz, *AGH University of Krakow, Poland*
- ❖ Antoni Grau, *Universitat Politècnica de Catalunya, Spain*
- ❖ Axel Sikora, *Institute Reliable Embedded Systems and Communication Electronics (ivESK), Offenburg University, Germany*
- ❖ Björn Ludwig, *Helmut-Schmidt-University, HSU-AI – Institute of AI, Germany*
- ❖ Chen-Wei Yang, *Lulea Tekniska Universitet, Sweden*
- ❖ Christoph-Alexander Holst, *inIT – Institute Industrial IT / TH-OWL, Germany*
- ❖ Fran Wilhelmi Roca, *Nokia Bell Labs, Germany*
- ❖ Gabriele Formis, *Politecnico di Torino, Italy*
- ❖ Gesa Benndorf, *Fraunhofer IOSB-INA, Germany*
- ❖ Howard Li, *University of New Brunswick, Canada*
- ❖ Javier Silvestre-Blanes, *University Politècnica de València, Spain*
- ❖ Kyi Thar, *Mid Sweden University, Sweden*
- ❖ Marcel Dix, *ABB, Germany*
- ❖ Marta Lenatti, *CNR-IEIT, Italy*
- ❖ Maxim Friesen, *inIT – Institute Industrial IT / TH-OWL, Germany*
- ❖ Paulo C. Bartolomeu, *University of Aveiro, Portugal*
- ❖ Sarder Fakhrol Abedin, *Mid Sweden University, Sweden*
- ❖ Sungho Suh, *Korea University, Republic of Korea*
- ❖ Tao Zheng, *Beijing Jiaotong University, China*
- ❖ Thorsten Jungeblut, *Bielefeld University of Applied Sciences and Arts, Germany*
- ❖ Tullio Facchinetti, *University Pavia, Italy*
- ❖ Ulrich Bùker, *inIT – Institute Industrial IT / TH-OWL, Germany*
- ❖ Valeriy Vyatkin, *Aalto University, Finland / Luleå, University of Technology, Sweden*
- ❖ Volker Lohweg, *inIT – Institute Industrial IT / TH-OWL, Germany*
- ❖ William Wenbin Dai, *Shanghai Jiao Tong University, China*