

ETFA 2025

Porto Portugal

9-12 September

30th IEEE International Conference on Emerging Technologies and Factory Automation

Call for Papers - Track 8

Advanced Sensing Technologies in the Industrial Internet of Things Era

Track chairs

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❖ **FOCUS.** The track is focused on the use of smart sensor technologies and information processing for monitoring and analysis of industrial systems, factory automation systems, and related applications. The track is also focused on architectural principles, design techniques, and implementation models for networked embedded sensor systems along with methods for their evaluation and/or performance analysis. Experience reports and case studies making appropriate scientific and technical contributions in this area are also solicited.

❖ TOPICS

❖ **Networked Sensing:** Novel components, devices and architectures; Devices and protocols for the (Industrial) Internet of Things; Energy harvesting in sensor networks; Network and system architectures; Security analysis and protocols; Communication protocols for sensor networks deployed in industrial scenarios

❖ **Information Processing:** Sensor data processing, data mining; (Distributed) Signal processing and data analytics; Sensor network modeling, simulation, measurements, and analysis; Network health monitoring, QoS management and dependability; Sensor tasking and actuation, wireless control and automation systems, orchestration for the IoT-to-Edge-to-Cloud compute continuum

❖ **Applications:** Industrial sensor network applications, deployment and case studies; Smart systems for production, optimization and green energy; Home and building automation, smart factories, smart grid, healthcare, precision agriculture, smart cities

❖ **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

- ❖ Andrzej Pawlowski, Wroclaw University of Science and Technology, PL
- ❖ Antonio Nocera, University of Pavia, IT
- ❖ Claudio Zunino, CNR-IEIIT, IT
- ❖ Constantino Álvarez, University of Oulu, FI
- ❖ Daniel Bujosa, Mälardalen University, SE
- ❖ David Hästbacka, Tampere University, FI
- ❖ Federico Tramarin, University of Modena and Reggio Emilia, IT
- ❖ Hans-Peter Bernhard, Silicon Austria Labs (SAL) and Johannes Kepler University Linz (JKU), AT
- ❖ Hossein Fotouhi, Mälardalen University, SE
- ❖ Ivanovitch Silva, Federal University of Rio Grande do Norte-Metropolis Digital Institute, BR
- ❖ Kristina Kunert, Umeå University, SE
- ❖ Luca Leonardi, University of Catania, IT
- ❖ Luis Pinto, University of Lisboa, PT
- ❖ Lukasz Wisniewski, Technische Hochschule Ostwestfalen Lippe, DE
- ❖ Miguel Bordallo Lopez, University of Oulu, FI
- ❖ Milhai Lazarescu, Politecnico di Torino, IT
- ❖ Paolo Napolitano, University of Milano-Bicocca, IT
- ❖ Peter Danielis, Institute of Computer Science, University of Rostock, DE
- ❖ Rafael Natalio Fontana Crespo, Department of Control and Computer Engineering, Politecnico di Torino, IT
- ❖ Sebastian Reiter, FZI Research Center for Information Technology, DE
- ❖ Sidney Carvalho, SLB, BR
- ❖ Stefano Scanzio, CNR-IEIIT, IT
- ❖ Theofanis Raptis, CNR-IIT, IT