



## Call for Papers

### Track 8 – Advanced Sensing Technologies in the Industrial Internet of Things Era

#### Track Chairs

**Luca Leonardi\***, **Inés Álvarez†**

\*University of Catania, Italy, [luca.leonardi@unict.it](mailto:luca.leonardi@unict.it)

†ABB Corporate Research, Sweden, [ines.alvarez-vadillo@se.abb.com](mailto:ines.alvarez-vadillo@se.abb.com)

**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

- ❖ Novel components, devices and protocols for the (Industrial) Internet of Things.
- ❖ Communication protocols for sensor networks deployed in industrial scenarios.
- ❖ Low-power wireless sensor networks for the (Industrial) Internet of Things.
- ❖ Network and system architectures for networked sensing.
- ❖ Energy harvesting in sensor networks.
- ❖ Security analysis and protocols.
- ❖ Sensor data processing and data mining.
- ❖ (Distributed) Signal processing and data analytics.
- ❖ Sensor network modeling, simulation, measurements, and analysis.
- ❖ Virtual prototyping systems for mass distribution of IoT sensors.
- ❖ 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.
- ❖ Containers and microservices in IoT application architecture.
- ❖ DevOps in IoT development and deployment.
- ❖ Industrial sensor network applications, deployment and case studies.
- ❖ Smart systems for production, optimization and green energy.
- ❖ Home and building automation, smart cities.
- ❖ Smart factories, smart grid, healthcare and precision agriculture.

#### AIM

The ETFA 2024 conference brings together professionals from industry and academia to share cutting-edge concepts, recent developments, research results, and practical achievements in industrial and factory automation. The key goal is to foster the enhancement and application of scientific techniques, models, and tools that support the efficient design and operation of industrial and factory automation systems.

#### SOLICITED PAPERS

- ◆ Original Research (Regular) ◆ Surveys ◆ Industry practice ◆ Work-in-progress

The working language of the conference is English, For submission rules, please refer to the Author's Instruction on the conference website.

#### PAPER ACCEPTANCE

Accepted, registered, and presented papers will be copyrighted by IEEE and published in the conference proceedings. The proceedings will be available in the IEEE Xplore® Digital Library. The final manuscript must be accompanied by a registration form and a registration fee payment proof and it is mandatory that at least one author attends and presents the paper at the conference. Failure to adhere to these guidelines may result in paper exclusion from post-conference distribution via IEEEExplore by the ETFA 2024 Organizing Committee. All conference attendees must pay the conference registration fee and cover their own personal expenses for travel and accommodations.

#### AUTHOR'S SCHEDULE 2024

##### ◆ Regular and special sessions papers

Submission deadline ..... **April 28<sup>th</sup>**  
Acceptance notification ..... **May 31<sup>st</sup>**  
Deadline for final manuscripts ..... **July 1<sup>st</sup>**

##### ◆ Work-in-progress/ Industry practice papers

Submission deadline ..... **May 26<sup>th</sup>**  
Acceptance notification ..... **June 17<sup>th</sup>**  
Deadline for final manuscripts ..... **July 1<sup>st</sup>**

#### TRACK PROGRAM COMMITTEE

- ❖ Hans-Peter Bernhard, Silicon Austria Labs (SAL) and Johannes Kepler University Linz (JKU), AT
- ❖ Dennis Brandão, USP, BR
- ❖ Peter Danielis, University of Rostock, DE
- ❖ Patrick Denzler, TU-Wien, AT
- ❖ Tullio Facchinetti, University of Pavia, IT
- ❖ Rafael Natalio Fontana Crespo, Politecnico di Torino, IT
- ❖ Hossein Fotouhi, Mälardalen University, SE
- ❖ David Hästbacka, Tampere University, FI
- ❖ Christos Koulamas, Industrial Systems Institute / "Athena" R.C., GR
- ❖ Kristina Kunert, Umeå University, SE
- ❖ Mihai T. Lazarescu, Politecnico di Torino, Italy
- ❖ Miguel Bordallo Lopez, University of Oulu, FI
- ❖ Alberto Morato, CNR-IEIT, IT
- ❖ Gaetano Patti, University of Catania, IT
- ❖ Andrzej Pawlowski, University of Brescia, IT
- ❖ Theofanis Raptis, IIT-CNR, IT
- ❖ Sebastian Reiter, FZI Forschungszentrum Informatik, DE
- ❖ Ivanovitch Silva, Federal University of Rio Grande do Norte - Metropolis Digital Institute, BR
- ❖ Andrey Somov, Skolkovo Institute of Science and Technology, RU
- ❖ Daesub Yoon, ETRI, KR
- ❖ Tao Zheng, Beijing Jiaotong University, CN
- ❖ Claudio Zunino, CNR-IEIT, IT