

Call for Papers

Track 8 - Intelligent Sensors, Sensor Networks, and Information Processing

Track chairs

Alessandro Biondi* - Scuola Superiore Sant'Anna, Italy

Frank Golatowski** - University of Rostock, Germany

* alessandro.biondi@santannapisa.it

** frank.golatowski@uni-rostock.de

❖ **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 researchers and practitioners from the industry and academia and provide them with a platform to report on recent advances and developments in the newly emerging areas of technology, as well as actual and potential applications to 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 (2022)

❖ Regular and special sessions papers

Submission deadline April 1
Acceptance notification May 6
Deadline for final manuscripts June 17

❖ Work-in-progress/Industry practice papers

Submission deadline May 13
Acceptance notification June 10
Deadline for final manuscripts June 17

Track Program Committee

- ❖ Paulo C. Bartolomeu, *Instituto de Telecomunicações, University of Aveiro, Portugal*
- ❖ Hans-Peter Bernhard, *Silicon Austria Labs (SAL) & Johannes Kepler University Linz (JKU), Austria*
- ❖ Dennis Brandao, *Federal University of Ouro Preto, Brazil*
- ❖ Peter Danielis, *University of Rostock, Germany*
- ❖ Tullio Facchinetti, *University of Pavia, Italy*
- ❖ David Hastbäckä, *Tampere University, Finland*
- ❖ Christos Koulamas, *iSi-Industrial Systems Institute / Athena R.C., Greece*
- ❖ Kristina Kunert, *Umeå University, Sweden*
- ❖ Mihai T. Lazarescu, *Politecnico di Torino, Italy*
- ❖ Oliver Niggemann, *Helmut Schmidt University / University of the Federal Armed Forces Hamburg, Germany*
- ❖ Tanir Ozcebebi, *Eindhoven University of Technology, Netherlands*
- ❖ Roberto Passerone, *University of Trento, Italy*
- ❖ Andrzej Pawlowski, *University of Brescia, Italy*
- ❖ Theofanis Raptis, *CNR-IIT, Italy*
- ❖ Veera Ragavan Sampath Kumar, *School of Engineering, Monash University, Malaysia Campus, Malaysia*
- ❖ Sebastian Reiter, *FZI Karlsruhe, Germany*
- ❖ Lucia Seno, *CNR - IEIT, Italy*
- ❖ Ivanovitch Silva, *Federal University of Rio Grande do Norte (DCA/UFRN), Brazil*
- ❖ Andrey Somov, *Skolkovo Institute of Science and Technology, Russia*
- ❖ Abhilash Thekkilakkattil, *Ericsson AB, Sweden*
- ❖ Daesub Yoon, *ETRI, Republic of Korea*
- ❖ Yudong Zhang, *University of Leicester, UK*
- ❖ Tao Zheng, *Beijing Jiatong University, China*
- ❖ Claudio Zunino, *CNR-IEIT, Italy*