

Annual Conference of the IEEE Industrial Electronics Society (IECON 2021)

Special Session on

“IoT automation technologies, tools and applications”

Organized by

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Call for Papers

The Industrial Internet of Things (IIoT) is now capable of providing solutions for various issues in the industrial domain, focusing on Machine-to-Machine communications, Big Data and Analytics. IIoT is supported by multiple frameworks, protocols and standards, allowing data collection from sensors, its dissemination and analysis, with the objective of enhancing manufacturing and industrial processes. Application use-cases have already appeared in various fields of the industry - not only in laboratories but real-life deployments, and deployment results start to provide insights for best practices. Furthermore, various tools aiding the engineering process of artifacts are more and more frequently used in IIoT contexts.

Topics of interest include, but are not limited to:

- Frameworks for the development of IIoT solutions
- Engineering process for IIoT solutions
- Engineering tools and toolchains for the IIoT
- Security solutions for IIoT systems
- Performance of IIoT architectures
- Standardisation of software architectures and communication protocols for interoperability, portability and configurability in SoS and IoT
- IIoT engineering tools
- Advanced techniques for verification and validation of SoS and IoT systems
- Interoperability between IIoT standards and existing industrial technologies
- Advanced analytics for IIoT use cases
- Application use cases and project pilots of IIoT technologies

Submissions Procedure: All the instructions for paper submission are included in the conference website: <https://attend.ieee.org/iecon-2021/>

Deadlines:

Full paper submission:	June 25, 2021
Paper acceptance notification:	July 30, 2021
Camera-ready paper submission:	Aug. 27, 2021

About the organizers:

Pal Varga, BME: He is associate Professor at the Department of Telecommunications and Media Informatics, BME, Hungary, where he got his M.Sc. (1997) degree in electrical engineering, and Ph.D. (2011) in computer science. Besides, he is director in AITIA International Inc. Earlier he was working for Ericsson Hungary and Tecnomen Ireland, as software design engineer and system architect, respectively. His main research interest include communication systems, network monitoring, network performance measurements, root cause analysis, fault localisation, traffic classification, end to end QoS and SLA issues, as well as hardware acceleration, and Internet of Things. He has been involved in various industrial as well as European research and development projects in these topics. He is the Editor-in-Chief of the Infocommunications Journal (HTE), and Editorial Board Member of the MDPI Sensors and MDPI Electronics journals.

Federico Montori, University of Bologna: He was born in 1990 and holds a MSc (2015) and a PhD (2019) in Computer Science and Engineering at the University of Bologna, Italy. He is now a Research Fellow at the University of Bologna and his research interests span over the area of Internet of Things, Mobile Computing, Service-Oriented Architectures for the IoT and Machine Learning for the IoT. He has several international collaborations and work experiences as a visiting researchers, among which Luleå University of Technology (Sweden) and Swinburne University of Technology (Australia). He has participated in several European projects, particularly in Internet of Energy, Arrowhead, and E2SG.