

THE 5TH IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL CYBER- PHYSICAL SYSTEMS ICPS 2022

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Special Session on

“IoT Automation Tools and Toolchains”

Organized by

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Call for Papers

Theme:

The Industrial Internet of Things (IIoT) is now capable of providing solutions for various issues in the industrial domain. IoT-based Industrial use cases are defined on top of standardized engineering processes, which may still be affected by issues such as high costs, incompatibility of legacy devices and scarce interoperability. At the same time, IIoT engineering processes are supported by several service-oriented frameworks, protocols, standards, and tools that overcome such gaps and enhance the whole production pipeline. Application use-cases have already appeared in various fields - not only in laboratories but real-life deployments, whose results provide insights for best practices.

Topics of interest include, but are not limited to:

- Frameworks for the development of 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
- 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
- Smart contracts and blockchain technologies for IIoT