

Sensors Council

## 2021 IEEE INTERNATIONAL WORKSHOP ON METROLOGY FOR INDUSTRY 4.0 & IoT

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# METROIND4.0&IoT

**CALL FOR PAPERS** for the Special Session on

# RAPID PROTOTYPING OF SMART INDUSTRIAL IOT SOLUTIONS

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www

facebook.com/MetroInd40IoT

Visit the conference website as well as Facebook page for each specific call and additional news.

#### ABSTRACT

IoT devices, embedded wireless sensors, and actuators are increasingly used to build Industrial Solutions even a large-scale. However, the rapid prototyping and practical deployment of IIoT applications still prove to be cumbersome and not sufficiently automated.

Even state-of-the-art algorithms and protocols need to be carefully tuned manually in order to adapt to the often harsh environmental conditions and/or to the application requirements.

The purpose of this special session is to bring together members from different research communities and industrial practitioners to systematically explore the challenges, issues, and opportunities in the research, design, and engineering of IIoT, usually subjected to constraint soft energy autonomy and advanced near-sensor processing. Rapid Prototyped solutions and real-world experiments or deployments are the focus of this session. Researchers and practitioners are invited to submit original contributions that aim to tackle the development and deployment of Industrial IoT applications in the real world.

High quality original technical articles are solicited, describing advances in Rapidprototyping IIoT, enabling technologies, as well as those which describe practical deployments and implementation experiences.

#### **TOPICS** -

Topics of interest include, but are not limited to:

- Experiences from real-world low-power IoT applications and deployments;
- Ultra-low power communications;
- Middleware support and services for interoperability between IIoT networks;
- Low Power in Long-range communication;
- AI-based IoT devices or Near-sensor AI;
- Resilient IIoT solutions;
- ENIoT—Energy Neutral Internet of (battery-less) things;
- Design and concept;
- Resource management and operating system support for energy harvesting sensing systems;
- Ultra-low power IoT Technologies and Embedded Systems Architectures
- Real Case Industrial Internet of Things (IIoT) development pilots driven by SME's/Start-ups.

http://www.metroind40iot.org/special-session-23

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