Special Session on: Scalable and Distributed Industrial Internet of Things Architectures and Industry 5.0 October 12-27 2023 Aveiro Congress Center, Portugal



In conjunction with IEEE WF-IoT 2023

## **Organizing Chairs:**

Dr Ayoub Khan University of Bisha, Saudi Arabia Dr. Hasita Kaja Samsung Electronics America, USA

#### **Programme Committee:**

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#### Description:

The number of devices in the Industrial Internet of things (IIoT) is increasing. Along with the increase in devices, managing these devices in the existing architectural model will bring great challenges to the current computing infrastructure. The technology is rapidly changing, and architecting for these situations can be complex. The existing data processing capacity of IIoT is becoming ineffective due to the generation of huge heterogeneous data byI IoT devices. It is important to realize that the success of IIoT depends on the scalability. The existing models and architectures are good for small-scale IIoT, however, the growing needs of the large IoT environment will need a decentralized and distributed model. In addition to the computing capability, the existing centralized models are expensive because of cloud infrastructure and maintenance cost. Moreover, the diversity of devices and their supporting cloud infrastructure makes machine-to-machine (M2M) communications complex as there is no guarantee for the connection and interoperability for all kind of devices. Hence, there is a need of new scalable methods, models, and architectures for efficient processing of distributed and autonomous data.

## **Topics of Interest:**

The topics of interest for this special session are around design, scalability, architecture and application of IIoT and Industry 5.0.

The Special Session aims to address but not limit to the following:

- Recent design trends in Industrial Internet of Things and Industry 5.0
- Design of scalable and reliable devices in IIoT
- Heterogeneity in IIoT devices and resources
- Distributed architecture for IIoT
- Management of devices and resource
- IoT gateway and edge network
- Flexible Architecture of IIoT
- Scalable Big data architectures
- Scalable IoT Applications
- Content delivery network in IIoT
- Parallel information processing in IIoT
- IoT Architectures for scalability
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# Paper Submission:

All papers must be submitted through eWorks. You must choose the Special Ssession track (Spes-10) when submitting your paper in order to be considered for this special session. The paper should be up to six (6) pages in length. The conference allows up to two additional pages for a maximum length of eight (8) pages upon payment of extra page fees once the paper has been accepted.

The paper can be prepared using the template available through the Authors / Proposers tab from the WF-IoT conference website main page at: <a href="https://wfiot2023.iot.ieee.org">https://wfiot2023.iot.ieee.org</a>.

An alternative is to use the IEEE Word or Latex tools that can be found through: <u>https://conferences.ieeeauthorcenter.ieee.org/write-your-paper/authoring-tools-and-templates/</u>.

### Important dates:

Paper submission: Jul 30, 2023 Notification of acceptance: Aug 21, 2023 Camera-ready submission: Sep 29, 2023 Presentation submission: Oct 2, 2023



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Authors of accepted papers will need to provide a final version of your paper in

PDF format and upload it by the camera-ready deadline and complete the assignment of copyright and release form. For your paper to be included in the proceedings and published in IEEE Xplore, at least one author is required to register for WF-IoT 2023 by the deadline.

## More information on the Special Session:

https://wfiot2023.iot.ieee.org/scalable-and-distributed-industrial-internet-thingsiiotarchitectures-and-industry-50