WFCS 2021

17th IEEE International Conference on Factory Communication Systems (WFCS)

June 9th -11th 2021, JKU LINZ, Austria

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DESCRIPTION

The Factory Communication area is facing the leap of new generation wired and wireless technologies e.g. TSN, WiFi6, 5G, and more, expanding from automation to the IIoT. Induced by the rapid change in consumer electronics towards **high performance wireless**, also many new industrial applications are about to move into the wireless domain. These strong and appealing ideas create many challenges addressed by recent research. Nevertheless, wired communication is also substantially developing, e.g. TSN, thus improving **dependable real-time communication**. More and more distributed control applications have an increasing need for real-time data exchange. **Mobile robots** and **UAVs** used in factories introduce the need of seamless integrated distributed systems to connect **edge computing** to intelligent **IIoT**. Hence, challenging questions arise on **wireless and wired** communication in **IT and OT** industrial networks supporting data, sensor, and actuator communication. In those systems, **security** is a major concern to lay base for safe processes. Measures from **AI** to **physical layer** security contribute to a next generation **dependable factory communication** regardless if wired or wireless.

The 17th edition of WFCS will focus on these challenges. The WFCS is the largest IEEE conference especially dedicated to communications for industrial automation systems. It is held the first time in Linz, Austria, an industrial emerging area with leading industries. It is a melting pot of academia and industry. This fact is shown by the local organizer mix of this WFCS which are Johannes Kepler University Linz, Silicon Austria Labs and Linz Center of Mechatronics GmbH. The WFCS is supported by IEEE and IES and led by the IEEE TC on Factory Automation, and will be hosted by the Johannes Kepler University Linz.

FOCUS ON:

Communication Systems and Technologies; Protocols and Standards for Networked Embedded and Cyber-Physical Systems; Real-time, Safety, Security and Maintenance of Automation Systems and Networks; applying Artificial Intelligence and Machine Learning to enhance and Communication Technologies for Industry 4.0; Low-power and Green Communication in Industry; recent advances in research domains with similar communication requirements.

SUBMISSION OF PAPERS:

Regular Papers: The WFCS conference is seeking submissions of up to 8 double-column pages reporting on novel and significant contributions to the field of industrial communication systems. **A Joint Call with Transactions on Industrial Informatics exists as well**: If you want to submit your paper to the joint call, please prepare it like a normal regular paper and follow the joint call guidelines.

Work-in-Progress (WIP) sessions: These sessions are intended for presentation of recent ideas and on-going works up to 4 double-column pages. WIP submissions should be prepared according to the same guidelines as regular papers, and should be submitted through the appropriate track in the electronic submission system. Accepted WIP papers will be published in the conference proceedings. Authors of accepted WiP paper will give a 5 minutes oral presentation at the WiP sessions, and will also present an A0 poster during the poster sessions.

http://2021.ieee-wfcs.org/

IMPORTANT DATES:

Special sessions proposal:

Deadline: Dec. 15th, 2020
Notification: Jan. 1st, 2021
Publish Call: Jan. 8th, 2021

Submission opens Nov. 15th, 2020

DEADLINES EXTENDED!

Regular and SS paper submission:

Deadline: Mar. 13th ,2021
Notification: Apr. 22nd ,2021
Final versions due: May 13th, 2021

Registration opens Apr. 22nd, 2021

WIP paper submission:

Deadline: May 9th, 2021
Notification: May 23rd, 2021
Final versions due: May 30th, 2021

Early registration ends May 31st, 2020

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