

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

## Special Session on

## “Predictive maintenance architectures and applications for industrial systems”

### Organized by

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## Call for Papers

**Theme:** Organizations are continuously researching new strategies to improve the Overall Equipment Effectiveness (OEE) of their equipment, from highly complex and computerised industrial machines to refurbished equipment. This is now possible due to the high levels of automation and, particularly to innovative IoT solutions.

Particularly, maintenance costs vary between 15% and 70% of production or ownership costs, making maintenance an important cost to be reduced. Therefore, this session aims at addressing the main problems of designing industrial maintenance systems, from the collection of data from sensors to its analysis supported by advanced algorithms. The session targets all kinds of maintenance paradigms, from reactive to predictive and prescriptive, or any other kind of advanced maintenance concepts, with a strong focus on architectures and design.

Topics of interest include, but are not limited to:

- Architectures for maintenance applications
- Industrial applications and pilots on emerging maintenance techniques
- Sensors and Cyber Physical Systems for maintenance applications
- Filtering of data
- Condition monitoring
- Machine learning algorithms
- Signal analysis algorithms for maintenance applications
- Diagnosis & Prognosis & Remaining useful life

- Maintenance safety
- New frontiers: Machine as a service, maintenance as a service and reliable manufacturing

**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

Note: This is session supported by the IEEE-IES Technical Committee on Industrial Informatics (TC-II)