

Annual Conference of the IEEE Industrial Electronics Society (IECON 2022)

Special Session on

“Predictive analytics architectures and applications for industrial systems – 2nd edition”

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 thanks to the high levels of automation and, particularly to innovative IoT solutions, the use of AI in manufacturing, PHM, digital twin and condition monitoring.

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:

1	Architectures for predictive analytics applications
2	Industrial applications and pilots on emerging maintenance techniques
3	Sensors and Cyber Physical Systems for maintenance applications
4	AI based control systems in advanced production
5	Prognostic and Health Management (PHM) / digital twin / condition monitoring
6	Machine learning algorithms
7	Signal analysis algorithms for maintenance applications
8	Diagnosis & Prognosis & Remaining useful life
9	Maintenance safety
10	New frontiers: Machine as a service, maintenance as a service and reliable manufacturing

Sponsoring IES Technical Committee(s):

IEEE IES Technical Committee on Industrial Informatics <https://tcii.ieee-ies.org/>

Submissions Procedure:

All the instructions for paper submission are included in the conference website: <https://iecon2022.org/>

Deadlines:

Full paper submission:	April 15, 2022
Paper acceptance notification:	June 17, 2022
Camera-ready paper submission:	July 29, 2022