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

Special Session on

"Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems"

Organized by

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Call for Papers

Theme:

In recent years, driven by the rapid advancements in electronics, information and communication technology, disruptive changes are taking place in the industrial environment. Due to the ever-increasing demands on product quality and economic benefit, not only are intelligent components and devices implemented and networked, but real-time supervision and control systems are also running in parallel.

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[1] Good quality papers may be considered for publication in the IEEE Trans. on Industrial Electronics, subject to further rounds of review.

Consequently, the degree of automation in modern industrial systems is continuously growing. This fact challenges scientists and engineers to develop advanced process monitoring and control methodologies, using offline, stored, or online process data to solve optimal process monitoring and control issues. This Special Session is to provide a forum for researchers and industrial engineers to exchange their latest results on data-driven process monitoring and control techniques, and to discuss the vital issues, challenges and possible future trends in modern large-scale industrial systems. The papers to be accepted in this Special Session are expected to provide the latest developments in data-driven design approaches, especially new theoretical results with practical applications.

Topics of interest include, but are not limited to:
- Data-driven process monitoring approaches and applications.
- Model-free or data-driven control design approaches and applications.
- Data-driven performance evaluation, diagnosis, decisions and their applications.
- Data-driven optimization methods and applications.
- Real-time model-free learning methods and practical applications.

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

IES Technical Committee Sponsoring the Special Session:

   TC: Data-Driven Control and Monitoring

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