



CALL FOR PAPERS - SPECIAL SESSION
“Data-driven process monitoring and safety control”
for CODIT’22
May 17-20, 2022 ▪ Istanbul, Turkey

Session Co-Chairs:

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Session description

This special session deals with the problem of data-driven process monitoring and safety control for industrial processes. Advanced process monitoring and safety control techniques are important tools in process industries for online condition monitoring, fault diagnosis, quality prediction, and safety control. However, the new challenges, such as the increasing scale and complexity of the system, the insufficient information extraction and knowledge utilization, the leakage and tampering of data and monitoring models, have begun to threaten the safety and stability of the entire industrial system. Therefore, building advanced process monitoring and safety control models becomes more challenging and faces considerable obstacles. Recently, emerging technologies such as big data analytics and artificial intelligence are intensively applied to industrial monitoring systems. However, challenges still exist in the development of big data- or AI-driven industrial monitoring systems.

The goal of this special session is to provide a remarkable opportunity for researchers and practitioners to present innovative solutions for data-driven process monitoring and safety control systems, and to discuss new challenges and future research directions in related fields. The topics of interest include, but are not limited to:

- Data-driven process monitoring and performance evaluation
- Data-driven fault detection and diagnosis
- Data-driven prognostics and health management
- Data-driven quality or KPIs prediction
- Data-driven virtual-sensor or soft-sensor
- Safety control for dynamical systems
- Safety decision for industrial systems
- New architectures and platforms of industrial monitoring systems

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **January 07, 2022** :

<http://controls.paperecept.net/conferences/scripts/start.pl>. In PaperCept, click on the **CoDIT 2022 link** **“Submit a Contribution to CoDIT 2022” and follow the steps.**

IMPORTANT: All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

DEADLINES

January 07, 2022: deadline for paper submission

March 4, 2022: notification of acceptance/reject

March 30, 2022: deadline for final paper and registration