Call For Papers

Special Session: Data-driven Modeling, Analysis and Control of Advanced Manufacturing Systems

Conference: The 2022 International Conference on Cyber-physical Social Intelligence (ICCSI)

Date:October 21-24, 2022 **Location:**Nanjing, China Meeting mode: Hybrid Web site: <u>https://iccsi2022.agist.org</u>

Modeling, analysis and control play crucial roles in the production management of advanced manufacturing systems. They are very helpful for managers to understand the system dynamics and operate it in the optimal ways.

The development of new technologies, such as internet of things (IoT), big data and machine learning, has led to a drastic increase in available data throughout advanced manufacturing systems. Based on these data, there arise many research opportunities and challenges in developing better modeling, analysis and control methods to improve system performance and optimize decision-making.

This special session will focus on research advances in the data-driven modeling, analysis and control methods for advanced manufacturing systems characterized by the complex and nonlinear dynamics. The goals of the session highlight comprehensive reviews, recent mathematical theory, analytical methods, development tools, future research trends and application fields in the advanced manufacturing environments.

The topics include but are not limited to:

- Sensor-based monitoring
- Data-driven modeling
- Performance evaluation
- Real-time control of production process
- New developments and techniques
- Applications and Case Studies

Important Dates:

May 15, 2022,	Full paper submission
July 1, 2022,	Acceptance/Rejection notification
August 31, 2022,	Final camera-ready papers due

Special Session Co-chairs:

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