Call For Papers

Special Session: Smart and Resilient Manufacturing and Supply Chain

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

Date: October 21-24, 2022 **Meeting mode**: Hybrid

Location: Nanjing, China Web site: https://iccsi2022.agist.org

Manufacturing and supply chain operations, as the critical driver of the global economy, have been undergoing paradigm changes on several fronts. These are robotics and automation, renewables and transactive energy, digital transformation, the emerging of a multi-dimensional reality, the intensive usage of data/analytics with cloud, edge computing and decision, and transport and logistics electrification, among others. All these technological advancements make it possible for manufacturing facilities and service infrastructure to be smart and resilient, paving the way of rapidly adapting and responding to uncertain demands and supplies by delivering high-quality and eco-friendly products and services. This Special Session is devoted to these recent developments, aiming to attract cutting-edge papers dealing with dynamic industrial and supply chain systems with smart decisions, innovative controls, and sustainable operations in Industry 4.0.

Interested topics include (but not limited to):

- Energy-aware manufacturing
- Transactive energy for low-carbon manufacturing
- Sustainable management of manufacturing systems: planning, scheduling, and control
- Modeling/analysis of smart manufacturing
- Sensor based monitoring, data analytics, and control and optimization for manufacturing processes and systems
- Cyber-physical systems for smart factories and processes
- Collaborative Robots for smart factories
- Cloud, distributed and digital manufacturing paradigms
- Smart Disassembly and remanufacturing
- Digital Twin, VR/AR for manufacturing
- Human-machine interfaces for smart manufacturing
- System reliability modeling and optimization
- Modeling, design and operations of resilient supply chain
- Industrial 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:

Prof. Ying (Gina) Tang (Rowan Univ., USA), email tang@rowan.edu

Prof. Mariagrazia Dotoli (Politecnico di Bari, Italy), email mariagrazia.dotoli@poliba.it

Prof. Tongdan Jin (Texas State University, USA), email: tj17@txstate.edu

Prof. Xiwang Guo (Liaoning Petrochemical University), email: x.w.guo@163.com

All inquiries about the session, including the letter of intent, should be sent to any of the co-chairs above