



THE 5TH IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL CYBER- PHYSICAL SYSTEMS ICPS 2022

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Special Session on

“Diagnosis and Automated Repair”

Organized by

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Call for Papers

Diagnosis refers to the identification of the root causes for malfunctions, using computational methods based on artificial intelligence. Due to the complexity of cyber-physical systems, efficient diagnosis aided by computational algorithms is vital. Increasingly, these diagnosis algorithms are also coupled to reconfiguration and repair mechanisms, which enable the system to return to a functioning state independently. With the advent of additive manufacturing, automated design and optimization of replacement parts is gaining increased interest. This session will cover the topics of diagnosis and automated repair, from classical diagnosis algorithms and data processing to reconfiguration and additive manufacturing.

Topics of interest include, but are not limited to:

- Diagnosis of CPS
- Model-based Diagnosis
- Reconfiguration Algorithms
- Additive Manufacturing
- Diagnosability
- Artificial Intelligence in Diagnosis
- Fault-adaptive Control
- Machine Learning in Diagnosis
- Machine Learning in Additive Manufacturing