CALL FOR PAPERS SPECIAL SESSION ON

Fault Diagnosis and Reliability of Systems

for ICCAD 2025 July 1-3, 2025, Barcelona, Spain

Session Co-Chairs:

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Session description:

The aim of this session is to focus on the development of fault diagnostic and resilience methods for complex systems. Diagnostic techniques involve continuous monitoring of system performance using sensors and data analysis algorithms to promptly identify faults and potential issues. On the other hand, resilience to faults encompasses the implementation of redundancy, automatic recovery, and error detection mechanisms to uphold system functionality despite faults or failures.

The main objective is to minimize the impacts of faults and ensure the safe and reliable operation of complex systems. This call for contributions seeks original papers that address cutting-edge research, advancements, and future trends in the domains of diagnosis and resilience in autonomous systems

The topics of interest include, but are not limited to:

- o Monitoring of complex systems
- Advanced diagnostic techniques
- Fault detection and identification
- o Prognostics and health management
- Sensorless control techniques
- Resilience strategies
- o Redundancy and fault tolerant control
- O Data-driven approaches for diagnosis and resilience
- o Machine learning and artificial intelligence in complex system diagnostics

SUBMISSION

Papers must be submitted electronically for peer review by: January 31, 2025 https://www.iccad-conf.com/submission/

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).