



CALL FOR PAPERS - SPECIAL SESSION
“Recent Advances on Application and Theory in
Discrete Event Systems”

for **CODIT 2026**
July 13-16, 2026 ▪ Bari, Italy

Session Co-Chairs:

Prof. Cristian Mahulea, Universidad de Zaragoza, Spain – cmahulea@unizar.es

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Session description:

Discrete event systems (DES) provide a fundamental framework for the modeling, analysis, and control of eventdriven dynamic processes, with broad applications in manufacturing systems, transportation systems, healthcare, communication systems, and cyber-physical systems. Formal tools such as Petri nets, automata, and supervisory control theory enable the rigorous representation of concurrency, synchronization, and logical decision-making in complex systems.

With the growing scale and complexity of modern cyber-physical and intelligent systems, DES research addresses increasing demands arising from environmental and system uncertainties, security, and resilience. Recent work has strengthened the theoretical foundations of supervisory control, opacity, and fault diagnosis, while also integrating data-driven and AI-based methodologies to improve decision making and operational performance. This special session brings together these advances, highlighting developments that enhance the modeling, analysis, and control of contemporary event-driven systems.

Sub-topics (include but are not limited to):

- DES modeling and analysis
- DES-related theories and applications
- Fault diagnosis and fault-tolerant control
- Attack detection and mitigation strategies
- Opacity, security, and attack detection
- Formal verification and supervisory control for security
- AI-driven approaches for dynamic optimization and control
- Applications of DES in cyber-physical and industrial systems

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **February 07, 2026**:

<http://controls.paperecept.net/conferences/scripts/start.pl>. In [PaperCept](#), click on the [CoDIT 2026](#) link “Submit a Contribution to CoDIT 2026” 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

February 07, 2026: deadline for paper submission

April 30, 2026: notification of acceptance/reject

May 20, 2026: deadline for final paper and registration