CALL FOR PAPERS
SPECIAL SESSION ON
"Formal Methods applied to Transportation and Industry 4.0"
for CODIT'20
June 29 - July 2, 2020 ▪ Prague, Czech Republic

Session Co-Chairs:

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Session description

Recent developments in cyber-physical systems lead to huge changes in the models, methods and tools used to help the decision making in numerous domains. Smart Transportation and Industry 4.0 concepts are already impacting the way that researchers develop and propose new issues to resolve problems related to industry and service. In order to transform the paradigms of the Smart Transportation and Industry 4.0 into reality, a lot of work is still needed at modeling and optimization levels. Discrete event formalism, models and methods are concerned at first.

This session is devoted to the development and use of formal tools and methods with discrete event systems to contribute to these new challenges. The aim is to discuss the new trends, review industrial needs and present innovative solutions in the transportation and production sectors. The session includes (but is not restricted to) the following topics:

- Discrete event formalisms for Industry 4.0 and Smart Transportation problems,
- Dioid algebra,
- Automata and Petri nets,
- Modelling and simulation,
- Decision support systems,
- Optimization and scheduling,
- Resource allocation,
- Monitoring and Supervisory control,
- Fault detection, isolation, and diagnosis.

Application areas include (not exclusively):

- Smart transportation,
- Smart manufacturing,
- Smart energy systems,
- Embedded systems,
- Power transmission systems,
- Sensor networks,
- …

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **January 24, 2020:**
http://controls.papercept.net/conferences/scripts/start.pl. In PaperCept, click on the **CoDIT 2020 link "Submit a Contribution to CoDIT 2020" 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

January 24, 2020: deadline for paper submission
April 10, 2020: notification of acceptance/reject
May 7, 2020: deadline for final paper and registration