

Special Track/Session on:

Control and analysis of discrete event systems:

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Presentation of the session:

Discrete Event Systems (DES) is a class of dynamical systems whose evolution is a consequence of the occurrence of events. Several formalisms have been introduced to control and analysis of such systems. Each formalism permit to resolve a particular problem in a given field. The main objective of this special session is to address the development of research and applications in the general area of DES. More precisely, it concerns the theoretical development and engineering solutions to a series of problems.

Topics of the session:

The session covers all topics and applications of DES, including (but not limited to) :

- Formalisms and modelling methodologies,
- Control of discrete event systems,
- Observation, state estimation and fault diagnosis,
- Optimization and scheduling,
- Identification of DES,
- Performance evaluation.

Applications: manufacturing systems, transportation systems, process control, distributed systems, software engineering, workflow, protocols and so on.

Keywords: Petri nets, automata, max-plus-algebra, queuing networks, Fault detection and diagnosis, Supervisory control, Performance evaluation.

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Submission: Papers should be submitted online to: https://cmt.research.microsoft.com/CEIT2015/

by February 15th, 2015. Papers should be written according to IEEE standard and not exceed 6 pages.



