Special Session on Multicore Cyber-Physical System and Applications (SS_MCSA 2016)

In conjunction with IEEE 10th International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoC-16), Lyon Congress Center, Lyon, France, September 21-23, 2016

OVERVIEW

Cyber-Physical System (CPS) is broadly defined as a system where the computationally capable entities control the physical entities. Though the concept first started mainly because of the advancements in the field of software engineering (that would enhance the computation capability), over the course of time, the scope of CPS is being increased to include and overlap with some other parallel concepts like Internet-of-Things (IoT), M2M (Machine-to-Machine) communication, and so on. A distinction between IoT and CPS could be made in the sense that CPS does not need to form or use a wide Internet type of infrastructure but the computation enabled entities could be capable of controlling some physical entities via some kind of cyber channel. Cyber Physical Systems (CPS) are often implemented on multicore platforms so that the computational pressure and performance requirements could be handled properly. Given the status quo, as the concept is being analyzed from various perspectives, in this special session, we are interested in inviting research papers that would report the current trends and future expectations and challenges in this and related areas. Applications on CPS alongside the theoretical foundations of various technologies and associated concepts are also welcome. The topics of interest of this special session are, but not limited to:

– Security in power systems
– Information and Communication Technology in CPS
– Transportation CPS
– CPS in smart grid communication
– Autonomous systems in future using CPS
– Convergence of services based on CPS
– Analysis and modeling issues of CPS
– Embedded system based applications
– Industrial control system support with CPS

IMPORTANT DATES

Paper Submission: March 11, 2016
Acceptance notification: June 24, 2016
Camera ready paper: July 15, 2016
Special Session: TBD

SUBMISSION GUIDELINES

Electronic paper submission should not exceed 8 double-column IEEE format pages, including figures and references. Papers should be formatted as close as possible to the final format – double column, single-spaced, and Times or equivalent font of minimum, 10pt size. The acceptable format is PDF only. Any other file format and manuscripts received in hard-copy form will not be processed. Please use IEEE Formats (http://www.ieee.org/conferences_events/conferences/publishing/templates.html) for paper formatting. Please submit via: http://mcsoc-forum.org/2016/?page_id=7

For any query, please contact the Program Chair, Al-Sakib Khan Pathan at sakib.pathan@gmail.com or spathan@ieee.org

SPECIAL ISSUE OF JOURNAL

High quality papers from the special session are planned to be invited for submission to Special Issues of prestigious journals, after appropriate revision and extension of the conference version.

COMMITTEE

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