Call for Papers

Symposium on Cyber-Physical & Cooperative Systems

as part of the 7th ASME/IEEE International Conference on

Mechatronic and Embedded Systems and Applications

August 29-31, 2011 Washington, DC, USA

http://iel.ucdavis.edu/mesa/MESA11/

Objectives: The combination of physical systems and networks has brought to light a new generation of engineered systems: Cyber-Physical Systems (CPS). CPS is informally defined as: "Computational thinking and integration of computation around the physical dynamic systems form Cyber-Physical Systems (CPS) where sensing, decision, actuation, computation, networking and physical processes are mixed." CPS applications can be found in medical devices and systems, patient monitoring devices, automotive and air traffic control, advanced automotive systems, process control, environmental monitoring, avionics, instrumentation, oil refineries, water usage control, cooperative robotics, manufacturing control, buildings, etc. Particular topics of interest include, but are not limited to:

- Human-centric Cyber Physical Systems
- Enabling embedded components in CPS
- New mission scenarios of CPS
- Cooperative Sensing policy in CPS
- Cooperative Actuation policy in CPS
- Information sharing and agreement in CPS
- Virtualization and virtual organization in CPS

- Complexity measures for CPS
- Random delay effects in CPS
- Communication management in CPS
- Mobility (mobile sensors and actuators) in CPS
- Multi-scale analysis of CPS
- Scale-free network structure of CPS
- Medical Cyber Physical Systems

Paper Submission: Manuscripts shall be no longer than 10 pages and shall adhere to the ASME author guidelines. Word and LaTeX templates are available from ASME to assist authors in preparing their papers for publication. Final papers in PDF format must be electronically submitted to: https://www.asmeconferences.org/IDETC2011
Accepted, peer-reviewed manuscripts will be published in the conference proceedings and EI indexed.

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Important Dates:

Submission of Abstract	11-02-2011
Submission of Full-Length Paper	18-02-2011
Author Notification of Acceptance	20-05-2011
Submission of Copyright Form	27-05-2011
Submission of Final Paper	30-05-2011

Technical Co-Sponsors:
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