

Trans. of the Inst. of Measurement and Control
Special Issue on
Sensing and Control in Cyber Physical Systems

Guest Editors

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Submission deadline for initial review: Nov 30, 2012

Contributions to the *Special Issue on Sensing and Control in Cyber Physical Systems* of the *Transactions of the Institute of Measurement and Control* is now open. This special issue will only include selected papers that were accepted (with extensive modifications that include journal quality results) from the **IEEE-CYBER 2012 conference** (www.ieee-cyber.org/2012). The authors are strongly encouraged to significantly improve and resubmit a 6 to 8 page manuscript to the *TIMC* manuscript website at <http://mc.manuscriptcentral.com/timc> by Nov 30, 2012 for possible inclusion in the Special Issue.

Overview

Cyber Physical Systems are typically designed as networks of interacting elements with physical input and output. Today's automation systems are increasingly equipped with sophisticated sensors and network interfaces to facilitate real-time monitoring and control through cyber infrastructure. As networking technology continues to increase in bandwidth and decrease in price, this trend is expected to grow by leaps as new generations of internet-friendly automation systems become increasingly interconnected to provide not only fast and cost-effective, but also advanced intelligent control to a wide variety of disciplines such as healthcare, homeland security, energy, telecommunications, environment, transportation, and manufacturing. In the near future, expected advances in science and engineering will improve the link between computational and physical elements, and dramatically elevate the autonomy, efficiency, functionality, reliability, and safety level of Cyber Physical Systems.

Scope

Topics of interest for this Special Issue include but are not limited to:

- Internet of Things and Sensor Network: Advanced "Internet of Things" technologies and applications; E-commerce; mobile commerce; logistics; transportation related issues; cyber security for energy and communication infrastructures; wireless, optical, and hybrid communications systems; internet security.

- Cyber Physical Systems: Embedded systems; integrated sensing, communication, and computational systems; chemical, biological, physical diagnostic and implantable systems; complex systems; mobile intelligent systems; micro power grids; electric power networks and grids; sustainable and distributed energy systems; energy scavenging systems; cyber technology to protect critical infrastructure.
- Cyber Control and Automation: Nonlinear control; multi-agent systems; co-operative control; control of energy systems; hybrid control; intelligent automation; intelligent control; automation in energy systems; automation in life sciences and healthcare; scheduling and coordination; and biomedical applications.

Important Dates

Initial Manuscript Submission: **Nov 30, 2012**. Submit a 6 to 8 page final manuscript for additional reviews by the *Transactions of the Institute of Measurement and Control* for possible inclusion in the *Special Issue on Sensing and Control in Cyber Physical Systems*. Manuscripts should be submitted through the manuscript website at <http://mc.manuscriptcentral.com/timc>

Acceptance Notification: **Jan 31, 2013**. If your paper is accepted, you will be notified by this date. However, if you did NOT present your paper at IEEE-CYBER 2012, your paper will be automatically rejected.

Revised Final Manuscript Due: **Feb 28, 2013**. If your paper is accepted, you MUST provide a revised final manuscript based on the reviewers' comments by this date. All accepted and revise manuscript should be sent directly to the manuscript website at <http://mc.manuscriptcentral.com/timc>.

Final Acceptance Notification: **March 31, 2013**

Transactions Publication Date: Tentatively in June 2013.

Manuscript Submission Information

Any questions regarding this Special Issue should be directed to the Guest Editor Yong LIU: liyuy1602@njust.edu.cn. Manuscript submissions must adhere to the layout and format guidelines of the *Transactions of the Institute for Measurement and Control*. The website is <http://tim.sagepub.com/content/32/6.toc>