Call for Papers

Special Focus on
Advanced Techniques for Event-Triggered Control and Estimation

Nowadays, embedded microprocessors and networks are commonly used in engineering systems, especially cyber-physical systems that consist of distributed sensors and actuators. They aim to perform a variety of tasks including data sensing and processing, state estimation, computation of control law, monitoring system security, etc. For a resource-limited microprocessor and a bandwidth-limited network, real-time scheduling algorithms become critical, among which the event-triggered mechanism has been extensively studied over the past decade. With the rapid development of control and estimation techniques for handling more complicated system dynamics and networked behaviors, there is a demanding request for advanced event-triggered techniques to match the tendency. In recent years, researchers have made an extensive effort on event-triggered approaches for nonlinear systems, networked multi-agent systems, and others. The special issue seeks collections of these state-of-the-art achievements in the field. It is envisioned that the contributions on advanced techniques for design of event-triggered control and estimation strategies will increase the functionality of microprocessors and efficiency of network communication in modern industrial systems. The topics of this special issue include, but are not limited to, the following research areas:

- Modeling of distributed event-based systems;
- Event-triggered control approaches for nonlinear systems;
- Event-triggered cooperative control of multi-agent systems;
- Event-triggering in distributed estimation of complex networks;
- Distributed event-triggered filtering of networked systems;
- Applications to industrial systems.

Submission

The papers should be edited in the SCIS template, and should be submitted online through the manuscript submission system of the SCIENCE CHINA Information Sciences. The submission website is: https://cn03.manuscriptcentral.com/scis. You should choose **Special Focus on Advanced Techniques for Event-Triggered Control and Estimation**. Information and guidelines on preparation of manuscripts are available on the journal website: http://scis.scichina.com.

Important Dates

Manuscript submission deadline: **May 15, 2019**
Acceptance notification: Aug. 15, 2019
Final manuscripts due: Oct. 15, 2019
Publication: Feb. 1, 2020

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