



Announcement

Call for Papers ASME Journal of Dynamic Systems, Measurement, and Control Special Issue on “Analysis and Control of Multi-Agent Dynamic Systems”

The use of multi-agent dynamic systems has received growing attention in recent years. The main objective of such systems is to optimize the use of group resources by benefiting from synergy, while using local information for control. Examples of such systems are groups of unmanned aerial vehicles, automated highway systems, and complex distributed manufacturing processes. The main challenges associated with the analysis and development of control algorithms for such systems are: the computational complexity of solving large-sized cooperative problems with coupled tasks, executing tasks under limited information, and obtaining scalable solutions.

The proposed special issue will focus on the following three topic areas as applied to multi-agent dynamic systems: (i) Cooperative decision and control, (ii) large scale systems, and (iii) hybrid dynamical systems. Examples of specific interest areas that are sought (but not limited to): cooperative task assignment and trajectory optimization, formation control of autonomous vehicles, sensor networks, traffic networks, distributed manufacturing processes, decentralized control, modeling and analysis of multi-agent systems, and cooperative games.

High quality original contributions involving these three focused topic areas are invited for publication in the Special Issue. Submitted papers must not be previously published nor submitted for publication elsewhere. All papers must be prepared and will be reviewed according to the standard guidelines of the JDSMC. Submission of papers must be done online using the ASME journal webpage: <http://journaltool.asme.org/>

Timetable:

Full paper submission:	April 1, 2006
First review and initial decision:	July 15, 2006
Revised submission:	September 15, 2006
Acceptance notification:	November 1, 2006
Final paper due:	November 15, 2006
Publication:	March 2007

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