



an Open Access Journal by MDPI

Large Scale Cooperative Systems: Control Theory and Applications

Guest Editors:

Dr. Venanzio Cichella

Department of Mechanical Engineering, University of Iowa, Iowa City, IA 52242, USA

Dr. Claire Walton

Department of Mathematics, The University of Texas at San Antonio, San Antonio, TX 78249, USA

Prof. Dr. Isaac I. Kaminer

Department of Mechanical and Astronautical Engineering, Naval Postgraduate School, Monterey, CA 93943, USA

Deadline for manuscript submissions:

closed (30 September 2023)

Message from the Guest Editors

Over the past few years, we have seen increasing interest in the study of large-scale multi-vehicle systems, with applications in engineering and science problems. This interest is largely motivated by the advent of powerful and miniaturized embedded systems, sensors, and communication networks

This Special Issue aims at collecting new theory, developments, methodologies, and applications of large-scale multiple autonomous ground, marine, and aerial systems.

We welcome submissions that provide the community with the most recent advancements on all aspects of large-scale cooperative systems. These include, but are not limited to, multi-agent coordination, cooperative control, flocking, swarming and counter-swarming, consensus, formation, multi-agent motion planning and collision avoidance, cooperative learning, and graph-related theory. Also relevant are the applications of the theory developed in the areas of multi-vehicle systems for spacecraft, aerial vehicles, ground robots, and maritime vehicles. Such applications include multi-agent target localization, object recognition, search and rescue, communications, defense, and transportation, to mention but a few.









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eyad H. Abed

Department of Electrical and Computer Engineering and the Institute for Systems Research, University of Maryland, College Park, MD 20742, USA

Message from the Editor-in-Chief

Automation (ISSN 2673-4052) is a international peer-reviewed open access journal devoted to fast latest publication of the achievements technological developments and scientific research in the huge area of automation and control system. Both experimental and theoretical papers are published, includina all aspects of manufacturing systems, energy management systems, aerospace control systems, micro- and nano-systems, learning systems, intelligent control systems and so on. Automation organizes Special Issues devoted to specific automation and controlling areas and applications each year.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within ESCI (Web of Science), Scopus, EBSCO,

and other databases.

Reliable Service: rigorous peer review and professional production.

Contact Us