



Networked Control of Multi-Robot Systems

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Message from the Guest Editors

With the recent technological development of broadband cellular networks, networked control of multi-robot systems has been enabled with higher accuracy, speed, and resilience in the control and estimation of large-scale robotic systems, such as multiple unmanned aerial vehicles, unmanned ground vehicles, and autonomous underwater vehicles, etc.

This Special Issue focuses on key theoretical and practical contributions to the control and estimation problems for networked multi-robot systems:

- Cooperative control of multi-robot systems;
- Networked control under communication constraints;
- Multi-robot formation control using local relative measurements, such as relative positions, bearings, and distances;
- Navigation and localization of multi-robot systems using local relative measurements, such as relative positions, bearings, and distances;
- Data-driven control of multi-agent systems;
- Cooperative path planning and following of multiple mobile robots, such as aerial, ground, and underwater robots;
- Resilient estimation and control of multi-robot systems;
- Swarm robotic behaviors and their applications;
- Distributed optimization of multi-robot systems.





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Message from the Editor-in-Chief

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