

## Special Issue

# Recent Progress in Multi-Robot Systems

### Message from the Guest Editors

Multi-robot systems have become an increasingly important area of research due to the growing demand for intelligent robots that can operate in complex environments. Recent advances in multi-robot systems have been driven by developments in sensing, communication, and control technologies, which have enabled robots to work together more efficiently and effectively. In particular, learning and control methods have played a critical role in enabling robots to operate autonomously and adaptively in dynamic and uncertain environments. This Special Issue aims to present state-of-the-art research in multi-robot systems, and to highlight the key challenges and opportunities in this field. We welcome both review papers and original research papers. Topics include, but are not limited to, the following:

- Multi-robot cooperative control;
- Distributed control and optimization in multi-agent systems;
- Reinforcement learning and deep reinforcement learning for multi-robot systems;
- Communication and sensing in multi-robot systems;
- Multi-robot perception and sensor fusion;
- Swarms and swarm intelligence;
- Human-robot interaction in multi-robot systems

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### Guest Editors

Dr. Zhongguo Li

Dr. Yunda Yan

Dr. Xuefang Wang

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### Deadline for manuscript submissions

15 January 2025



## Machines

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## About the Journal

### Message from the Editor-in-Chief

*Machines* is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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### Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso  
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