

Special Issue

The State of the Art of Swarm Robotics

Message from the Guest Editors

Swarm robotic systems are large teams of small, simple, and collaborative robots, implemented with the aim of replacing traditional small teams of large and sophisticated robots. The use of such large teams of simple robots promotes both robustness to environmental disturbances and failure of robot components, as well as flexibility in their application to real-world problems that may be inaccessible to larger robots. The goal of this Special Issue is thus to provide an opportunity to present state-of-the-art contributions in swarm robotics that address problems including but not limited to swarm perception, communication, localization, mapping, motion planning, motion control, human–swarm interactions, simulation platforms, and robotic platforms.

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About the Journal

Message from the Editor-in-Chief

It is my great pleasure to welcome you to our open access journal, *Robotics*, which is dedicated to both the foundations of artificial intelligence, bio-mechanics and mechatronics, and the real-world applications of robotic perception, cognition and actions. The 21st century is the robotics century and intelligent robots will change our lifestyle forever. Let us work together toward the realization of intelligent robots step by step. It is great fun to create intelligent robots and imagine their practical applications. *Robotics* is now ready to serve you in the long journey towards such a goal.

Editor-in-Chief

Prof. Dr. Marco Ceccarelli

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