

Special issue on “Intelligence in robotics”

Intelligence in robotics is an extension of automation, which makes the robot smarter, thus assisting human beings in a more efficient way. In real world environment, intelligence in robotics mainly involves its action or body motion, including structural intelligence, manipulation intelligence, mobility intelligence, and human-robot interaction intelligence. For example, the robot could change its configuration with structural intelligence; the robot could learn new skills during manipulation with manipulation intelligence; the robot could move autonomously with mobility intelligence; and the robot could interact with people intuitively according to human intention with human-robot interaction intelligence. The foundation of robot intelligence is computing, and the core is learning, which make robots imitate human beings. For example, perception of robot imitates human sensing the environment, decision making of robot imitate human handling tasks under various circumstances, and skill transfer of robot imitates human learning and creating.

This special issue in *Robotica* is intended to expedite publication of novel and significant research results, technology and/or conceptual breakthrough of emerging topics of *intelligence in robotics*. We invite submission of high-quality papers as related to recent advances in such emerging topics, including but are not limited to the following:

- **Novel design of metamorphic structure and application in robot**
- **Bio-inspired sensing and actuation**
- **Human-robot manipulation skill learning**
- **Simultaneous Localization and Mapping**
- **Autonomous manipulation robot**
- **Wearable robotics and bio-mechatronics systems**
- **Human-in-the-loop control of robot**
- **Human-robot interaction**
- **Robot reinforcement learning**
- **Neurorobotics**
- **robotic intelligence inspired by human behavior intelligence**

Submission guidelines

Submission link: <https://mc.manuscriptcentral.com/cup/robotica>

For more information: <https://www.cambridge.org/core/journals/robotica/announcements/call-for-papers/special-issue-intelligence-in-robotics>

Important Dates

Deadline for first submission:	Dec. 30, 2022
First round review complete:	Mar. 30, 2023
Revised submission due:	May. 15, 2023
Second round review complete:	Jun. 15, 2023
Final decision due:	Jul. 30, 2023

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