

CALL FOR PAPERS

“Artificial Intelligence for Robotics”

The Theme: Artificial intelligence (AI) technologies, covering areas such as cognition, analysis, inference and decision-making, enable robots to act smartly and greatly enhance robots' capabilities to assist and support humans. As a primary carrier of AI technologies, robotics is one of the domains of applications for AI to demonstrate its strong ability. Augmenting robots with AI technologies for the engineering systems, robots are expected to have more pervasive applications in industry, agriculture, logistics, medicine, and to name but a few. This special issue will be dedicated for AI for robotics, including AI to support human-robot interaction, AI for multi-robot systems, AI learning algorithms in robotics, ethics of AI in the context of robotics, and applications of AI-enabled robots. The special issue will publish original papers of innovative ideas and concepts, new discoveries and improvements, and novel applications to the field of AI for robotics. Topics covered in this special issue include, but are not limited to:

- AI for multi-robot systems
- AI in autonomous systems
- AI in cognitive robotics
- AI in human-robot interaction
- AI-enabled robots to assist health professionals as in the case of COVID-19
- Applications of AI-enabled robots in industry/agriculture/logistics/medicine
- Augmented intelligence in robotics
- Conversational AI and natural language processing for robotic systems
- Deep learning systems and methods in robotics
- Explainable and interpretable AI for robotic system
- Machine learning methods in robotics
- Perception, reasoning and planning in advanced intelligent robot tasks
- Technical papers on Ethics and social implications of AI in robotics

Manuscript Preparation and Submission

All manuscripts are to be submitted through the Manuscript Central for IEEE TAI at <https://mc.manuscriptcentral.com/tai-ieee>. All manuscripts must be prepared according to the IEEE TAI publication guidelines that can be accessed at <https://cis.ieee.org/publications/ieee-transactions-on-artificial-intelligence/information-for-authors-tai>, and will be reviewed following the standard IEEE TAI review process

Timetable

Deadline for manuscript submissions	November 1, 2020
Completion of the first-round review	February 1, 2021
Submission of revised paper	March 1, 2021
Decision on second round of reviews	May 1, 2021

Guest Editors

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