Special Issue

Embodied Intelligence: Physical Human–Robot Interaction

Message from the Guest Editor

Recent advancements in robotics and human–robot interaction (HRI) have led to significant progress in the realm of embodied AI, in which robots demonstrate physical behaviors and engage in complex interactions with humans and the 3D world. This evolving field holds vast potential in industries such as healthcare, manufacturing, and assistive technologies.

This Special Issue welcomes the submission of papers that explore cutting-edge approaches to embodied AI within the scope of physical human–robot interaction, intelligent grasping, exploration and feedback mechanisms. Submissions that integrate robot learning, embodied planning, vision-language understanding, tactile sensing, adaptive control strategies, and iterative feedback loops to enhance the manipulation capabilities of robotics are highly encouraged. We also welcome theoretical studies that delve into the intersection of embodied AI, dynamics, cognitive science, and interactive systems, as well as real-world applications in healthcare robotics, industrial automation, and beyond.

Guest Editor

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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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