Special Issue

Robotic Intelligence Development of AI in Robot Perception, Learning, and Decision

Message from the Guest Editors

This Special Issue, 'Robotic Intelligence Frontier' Exploration of AI in Robot Perception, Learning, and Decision,' focuses on the transformative role of Artificial Intelligence (AI) in enhancing robotic capabilities. We aim to explore key areas such as Brain-Computer Interfaces (BCIs), reinforcement learning, robot perception through computer vision, humanoid robots with emotional intelligence, collaborative robots (cobots), smart manufacturing in Industry 4.0, intelligent medical robots, augmented reality interactions, adaptive systems, and multi-robot systems. We invite contributions that examine how AI reshapes these domains, enabling robots to learn, perceive, collaborate, and adapt in dynamic environments. Topics of interest include advanced BCIs for human-robot interaction, reinforcement learning applications, the development of emotional humanoid robots, and Al advancements in smart manufacturing and medical robotics. We look forward to your innovative research in these exciting areas. Thank you!

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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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