Special Issue

Adaptive and Nonlinear Control of Robotics

Message from the Guest Editor

Mathematically speaking, robot dynamics are represented by systems of highly coupled nonlinear differential equations. While these dynamics can be linearized under restrictive assumptions of exact or partial model knowledge, most practical robot control designs end up with nonlinear closed-loop dynamics. Adaptive control, which includes neural network/learning-based control designs, particularly necessitates the application of nonlinear control systems analysis techniques. In this Special Issue, we would like to focus on emerging techniques in the adaptive and nonlinear control of robotics, as they apply to novel control problems and state-of-the-art robot configurations/designs.

Guest Editor

Prof. Dr. Aman Behal

Department of Electrical and Computer Engineering and the NanoScience Technology Center, University of Central Florida, Orlando, FL 32816, USA

Deadline for manuscript submissions

closed (31 October 2025)

Robotics

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 7.7

mdpi.com/si/194677

Robotics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
robotics@mdpi.com

mdpi.com/journal/robotics

Robotics

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 7.7

mdpi.com/journal/robotics

MDPI

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
LARM2: Laboratory of Robot Mechatronics, Department of Industrial Engineering, University of Rome Tor Vergata, Via del Politecnico 1, 00133 Roma, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), dblp, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Robotics) / CiteScore - Q1 (Control and Optimization)