Adaptive and Nonlinear Control of Robotics

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Message from the Guest Editor

Dear Colleagues,

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.

Special Issue

Editor-in-Chief

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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.

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