

Special Issue

Modeling, Optimization and Control of Robotic Systems

Message from the Guest Editors

Robotics has grown in importance in industrial applications, domestic services, and healthcare as one of the most promising future technologies. Robotics is concerned with interdisciplinary research and development in fields such as design optimization, kinematics, dynamics, motion planning, control, sensors, and machine intelligence. The control system is at the heart of robotic system development and implementation. The breadth of robotics and control research has resulted in numerous notable achievements that can be shared with the research community. The proposed Special Issue's main goal is to present a cutting-edge collection of articles presenting novel developments in robot dynamic modeling, optimization and control, as well as experimental studies related to their use in real-world applications. This Special Issue covers a variety of contributions from different fields.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editorial Board

We are just entering the Next Wave of Technology (NWT) where actuators will play the same role as the computer chip did for computers/social media approximately four decades ago. Just in the U.S., production of \$1 trillion year of electromechanical systems (vehicles, orthotics, manufacturing cells, freight trains, aircraft, etc.) will be impacted by the NWT, all driven by actuators. Five key trends can be found for the future perspectives: “Performance to Reliability”, “Hard to Soft”, “Macro to Nano”, “Homo to Hetero” and “Single to Multi functional”. We invite papers that primarily impact these economic sectors; those illustrating basic scientific principles are also welcome.

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