Application of Mathematical Analysis and Theory to Robotics

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Message from the Guest Editors

Dear Colleagues,

This Special Issue of *Mathematics* focuses on the Application of Mathematical Analysis and Theory to Robotics, with the aim of solving emerging problems in a creative, novel, and efficient way, as well as optimizing solutions to existing robotics problems. With the exponential growth of new areas of robotics, such as reconfigurable manipulators, walking machines, rehabilitation robots, grasping robots, collaborative robots, hyper-redundant manipulators, and so on, in addition to conventional robots such as parallel and serial manipulators, mathematical methods have been challenged to progress in relatively short periods of time. The benefits of efficient mathematical methods in line with new robot manipulators are reflected, for example, in faster, more accurate, and environmentally friendly robots. The purpose of this Special Issue is to selectively collect new results related to the application of known and new mathematical methods for solving emerging problems in robotics, in addition to improving existing ones. Thus, this is an open invitation to academics to share research work in this area.

Special Issue

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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