





Special Issue Reprint

Optimization of Motion Planning and Control for Automatic Machines, Robots and Multibody Systems

www.mdpi.com/books/reprint/2830

Edited by Dario Richiedei Paolo Boscariol

ISBN 978-3-03943-060-4 (Hardback) ISBN 978-3-03943-061-1 (PDF)



The optimization of motion and trajectory planning is an effective and usually costless approach to improving the performance of robots, mechatronic systems, automatic machines and multibody systems. Indeed, wise planning increases precision and machine productivity, while reducing vibrations, motion time, actuation effort and energy consumption. On the other hand, the availability of optimized methods for motion planning allows for a cheaper and lighter system construction. The issue of motion planning is also tightly linked with the synthesis of high-performance feedback and feedforward control schemes, which can either enhance the effectiveness of motion planning or compensate for its gaps. To collect and disseminate a meaningful collection of these applications, this book proposes 15 novel research studies that cover different sub-areas, in the framework of motion planning and control.





MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

