



mathematics



Special Issue Reprint

Evolutionary Computation & Swarm Intelligence

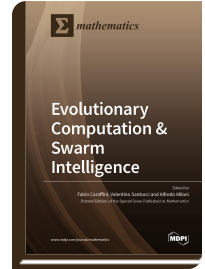
www.mdpi.com/books/reprint/3131

Edited by

Fabio Caraffini

Valentino Santucci

Alfredo Milani



ISBN 978-3-03943-454-1 (Hardback)

ISBN 978-3-03943-455-8 (PDF)

The vast majority of real-world problems can be expressed as an optimisation task by formulating an objective function, also known as cost or fitness function. The most logical methods to optimise such a function when (1) an analytical expression is not available, (2) mathematical hypotheses do not hold, and (3) the dimensionality of the problem or stringent real-time requirements make it infeasible to find an exact solution mathematically are from the field of Evolutionary Computation (EC) and Swarm Intelligence (SI). The latter are broad and still growing subjects in Computer Science in the study of metaheuristic approaches, i.e., those approaches which do not make any assumptions about the problem function, inspired from natural phenomena such as, in the first place, the evolution process and the collaborative behaviours of groups of animals and communities, respectively. This book contains recent advances in the EC and SI fields, covering most themes currently receiving a great deal of attention such as benchmarking and tuning of optimisation algorithms, their algorithm design process, and their application to solve challenging real-world problems to face large-scale domains.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/3131

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.