Special Issue

Algorithms for Real-World Complex Engineering Optimization Problems

Message from the Guest Editors

The primary objective of this Special Issue is to compile a comprehensive collection of cutting-edge research findings in science and engineering on optimization theory, methods, and applications. It also intends to bring together research that uses optimization algorithms to solve complex real-world engineering problems, evaluates their advantages and shortcomings, makes required adjustments to existing approaches, and introduces new algorithms. Original research and review contributions that use evolutionary and metaheuristic optimization algorithms to solve complex and large-scale engineering problems are invited.

- Evolutionary optimization algorithms and variants;
- Metaheuristic optimization algorithms and variants;
- Single- and multi-objective optimization algorithms;
- Many-objective optimization algorithms;
- Constrained and unconstrained problems;
- Artificial intelligence and machine learning;
- Shape optimization algorithms;
- Inverse optimization algorithms;
- Robust optimization algorithms;
- Stochastic optimization algorithms;
- Discrete and combinatorial optimization algorithms;
- Application of algorithms in various real-world engineering problems.

Guest Editors

Dr. Colin Johnson

School of Computer Science, University of Nottingham, Nottingham NG8 1BB, UK

Dr. M. Premkumar

Department of Electrical & Electronics Engineering, Dayananda Sagar College of Engineering, Bengaluru, Karnataka 560078, India

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Algorithms
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
algorithms@mdpi.com

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About the Journal

Message from the Editor-in-Chief

Algorithms are the very core of Computer Science. The whole area has been considered from quite different perspectives, having led to the development of many sub-communities: Complexity theory (limitations), approximation or parameterized algorithms (types of problems), geometric algorithms (subject area), metaheuristics, algorithm engineering, medical imaging (applications), indicates the range of perspectives. Our journal welcomes submissions written from any of these perspectives, so that it may become a forum for exchange of ideas between the corresponding scientific subcommunities.

Editor-in-Chief

Prof. Dr. Frank Werner
Faculty of Mathematics, Otto-von-Guericke-University, P.O. Box 4120, D-39016 Magdeburg, Germany

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