



Metaheuristic Algorithms for Combinatorial Optimization Problems

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Message from the Guest Editors

Most combinatorial optimisation problems are NP-hard, which means that there are no polynomial time algorithms that can solve them in reasonable time. Large combinatorial optimisation problems may be effectively solved using metaheuristics, but it is often impossible to search the whole problem space, therefore it is not possible to guarantee an optimal solution. Metaheuristics can be classified in several ways. Those that encode problems using real variables that are used for continuous optimisation and those that use discrete variables for combinatorial optimisation. Single-point metaheuristics that use local search heuristics, e.g., Tabu Search, Simulated Annealing and Greedy Randomised Adaptive Search, whilst population-based metaheuristics, such as Genetic Algorithms, Ant Colony Optimization and Particle Swarm Optimization that produce multiple solutions that explore the search space.





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Message from the Editor-in-Chief

Algorithms are the core of computational mathematics and computer science. The whole area has been considered from different perspectives, which has led to the development of several sub-communities. The aim is to bring together researchers and practitioners from different areas of computational mathematics and computer science and to offer a platform for interdisciplinary applications in different areas of science and technology. In this way, *Algorithms* may become a forum for the exchange of new stimulating ideas between the different sub-communities working in the area of algorithms and their applications and the presentation of high-quality novel algorithmic approaches.

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