

Special Issue on
Combinatorial Optimization Problems

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Description

Combinatorial Optimization Problems consist in finding an optimal solution (according to some objective function) from a finite search space. These problems arise in Industry and Academia and, unfortunately, most of them cannot be solved efficiently, that is, they are NP-hard and no polynomial time algorithm is known to solve them. For this reason, in the last decades researches have investigated the use of stochastic search algorithms to find near optimal solutions to these problems. In particular, a great research effort has been devoted to the development of metaheuristic algorithms to solve combinatorial optimization problems.

Successfully solved problems include scheduling, resource assignment, timetabling, network design, transportation and distribution, vehicle routing, travelling salesman, graph problems, satisfiability, energy optimization, cutting and packing; and planning problems.

Prominent examples of metaheuristics include evolutionary algorithms, simulated annealing, tabu search, scatter search, memetic algorithms, ant colony optimization, particle swarm optimization, variable neighborhood search, iterated local search, greedy randomized adaptive search procedures, estimation of distribution algorithms, hyper-heuristics and hybrid algorithms.

We encourage authors to submit original high-quality research on the application of metaheuristic algorithms to combinatorial optimization problems or theoretical aspects concerning algorithms or problems. The publication of the special issue is tentatively scheduled for Winter 2016.

Submission

Authors should submit their manuscripts to the Evolutionary Computation Editorial Manager at <http://ecj.fhv.at/>. When submitting a paper, please send at the same time also an email to Francisco Chicano (chicano@lcc.uma.es) and a copy to ecj@fhv.at mentioning the special issue, the paper title, and author list to inform about the submission.