

Evaluation of the exIWO Algorithm Based on the Traveling Salesman Problem

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Abstract : The expanded Invasive Weed Optimization algorithm (exIWO) is an optimization metaheuristic modelled on the original IWO version created by the researchers from the University of Tehran. The authors of the present paper have extended the exIWO algorithm introducing a set of both deterministic and non-deterministic strategies of individuals' selection. The goal of the project was to evaluate the exIWO by testing its usefulness for solving some test instances of the traveling salesman problem (TSP) taken from the TSPLIB collection which allows comparing the experimental results with optimal values.

Keywords : expanded invasive weed optimization algorithm (exIWO), traveling salesman problem (TSP), heuristic approach, inversion operator

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