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Authors:

Ashay Shrivastava

Manish Gupta

Shashank Swami

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Abstract

Artificial Bee Colony (ABC) Algorithm is an optimization algorithm used to find out the global optima. In ABC, each bee stores the information of feasible solution or candidate solution and stochastically modifies this over time, based on the information provided by neighboring bees, it speculatively modifies over time and based on the best solution found by the bee itself. . In this proposed work, enhanced ABC algorithm with SPV for travelling salesman problem is used. In this modified bee colony algorithm, additional phase in the form of mutation is used after the scout bee phase and the SPV rule is used in this work for improving local search. After modification, proposed algorithm is implemented on standard travelling salesman problem for checking the efficiency of proposed work. The experimental results are compared with ABC algorithm and ABC with SPV algorithm.

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Index Terms

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