## Comparative Analysis of Two Different Ant Colony Optimization Algorithm for Solving Travelling Salesman Problem

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**Abstract :** Ant Colony Optimization is heuristic Algorithm which has been proven a successful technique applied on number of combinatorial optimization problems. Two variants of Ant Colony Optimization algorithm named Ant System and Max-Min Ant System are implemented in MATLAB to solve travelling Salesman Problem and the results are compared. In, this paper both systems are analyzed by solving the some Travelling Salesman Problem and depict which system solve the problem better in term of cost and time.

Keywords : Ant Colony Optimization, Travelling Salesman Problem, Ant System, Max-Min Ant System

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