**TRAVELLING SALESMAN PROBLEM**

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ABSTRACT : In this paper, an efficient technique is proposed to solve the travelling salesman problem(TSP) using improved ant colony optimization algorithm. The main aim of this problem is to search the way tour for a salesman to visit all cities exactly once and finally return to the starting city. Ant colony optimization (ACO) is a heuristic algorithm which has been proven a successful technique and applied to a number of combinatorial optimization problems and is taken as one of the high performance computing methods for Travelling salesman person (TSP). The paper proposes an improved ant colony optimization algorithm with two highlights. First, candidate set strategy is adopted to rapid convergence speed. Second, a dynamic updating rule for heuristic parameter based on entropy to improve the performance in solving TSP.