“DEVELOPMENT OF HYBRID CROSS ENTROPY-TABU SEARCH ALGORITHM FOR TRAVELLING REPAIRMAN PROBLEM”

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ABSTRACT

Traveling Repairman Problem (TRP) is one variant of the Traveling Salesman Problem (TSP) which has the objective function to minimize the total waiting time for customers served by the repairman. The goal of the TRP to be very important because of the application in the real case that customers need the urgent services and must be served immediately so that it is related to customer satisfaction. TRP is a combinatorial problem that requires a long computational time for large scale problem so that need metaheuristic method approach to solve it. Cross Entropy is an metaheuristic approach that already shown better results to solve some combinatorial optimization problems. Tabu Search is an algorithm that has long been used for solving combinatorial optimization. This research combine between Cross Entropy algorithm and Tabu Search to get better results to solve the Travelling Repairman Problem.

Keywords : Travelling Repairman Problem, combinatorial, Cross Entropy, Tabu Search, Hybrid Cross Entropy-Tabu Search.
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