

Solving the Vehicle Routing problem with Reduced Capacity with Maximizing Customer Satisfaction using Genetic Algorithm

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ABSTRACT

The vehicle routing problem is one of the most well-known problems in the field of optimization. This problem is very diverse due to being ranked NP-COMplete. This paper proposes new assumptions to bring this problem closer to real situations, the most important of which is the limited and limited capacity of vehicles with a reduced rate in each vehicle. Genetic algorithm is used to solve this problem in short time and with high quality. The results show that the genetic algorithm can solve this problem to a large extent in a reasonable time with the least error.

Keywords: Vehicle Routing, Genetic Algorithm, Exact solution, Reduced Capacity

