

ABSTRACT

THE SHORTEST SEARCH SHIPPING SYSTEM OF YAMAHA MOTORCYCLE FROM WAREHOUSE TO SUBDEALER USING ANT COLONY METHOD

(Case Study: PT. Thamrin Brothers)

Motorcycle delivery is an important issue in the distribution system. The problem of motorcycle delivery is generally described as a case where one must send a motorcycle from one location to another, assuming a distance is known. The purpose of this problem is to minimize the total mileage of motor delivery. One method that can be used in finding the shortest path for motorcycle delivery is the Ant Colony Algorithm. Ant Colony algorithm, also called Ant Colony Optimization (ACO), is a metaheuristic search method that is inspired by ant behavior in solving optimization problems, including in the problem of finding the shortest route. Ant Colony algorithm can be used to find the shortest route to location between motorcycle, so it can be used as shortest path in delivery of motorcycle from location to other location. Testing on Yamaha motorcycle delivery proved that the system can produce the shortest route for motor delivery.

Kata Kunci : The Shortest Search, Ant Colony, Google Maps