



**PROJECT REPORT
COMPARISON BETWEEN GREEDY AND
GENETIC ALGORITHM IN TRAVELLING
SALESMAN PROBLEM**

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The author is aware that in this task, the writer cannot provide perfect results. There are still many mistakes made by the author in completing this thesis. The author hopes that this thesis can help broaden insight about the topics taken by the author.

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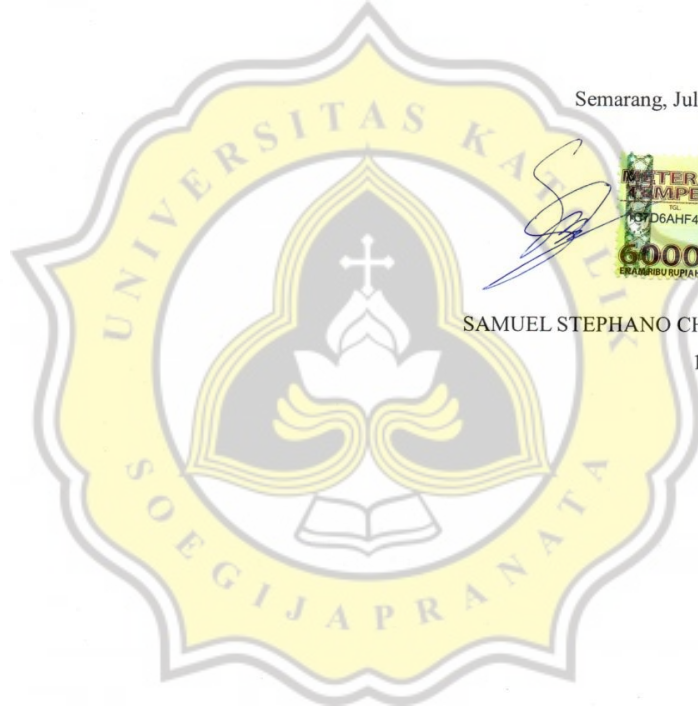
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ABSTRACT

This research was made in order to compare branch and bound algorithms and genetics. In this case, the TSP case is taken, which means that it requires the fastest route to get from one point to another without being able to pass the same point for the data used is data from the Polrestabes of Semarang about which areas will be sprayed disinfectant.

For the data route, it will be taken directly to the place and via online, then made into a graph. For coordinates and distance are also assisted with Google maps. Then the data is converted into a table form.

The final results of this study are, two algorithms used are able to provide optimal results, the fastest route when compared to the initial route, and with some data, both algorithms can show which is better in producing an optimal route. For the 10 datasets scenario, the Greedy Algorithm cannot give good results compared to the initial results, but the Genetic Algorithm is able to give lower results. But on 70 datasets scenario, both algorithms are able to provide optimal results. The Greedy Algorithm is superior in the use of its algorithm because it is simpler than the Genetic Algorithm which has to balance the many factors needed.

Keyword: Genetic Algorithm, Greedy Algorithm, tsp, fastest route

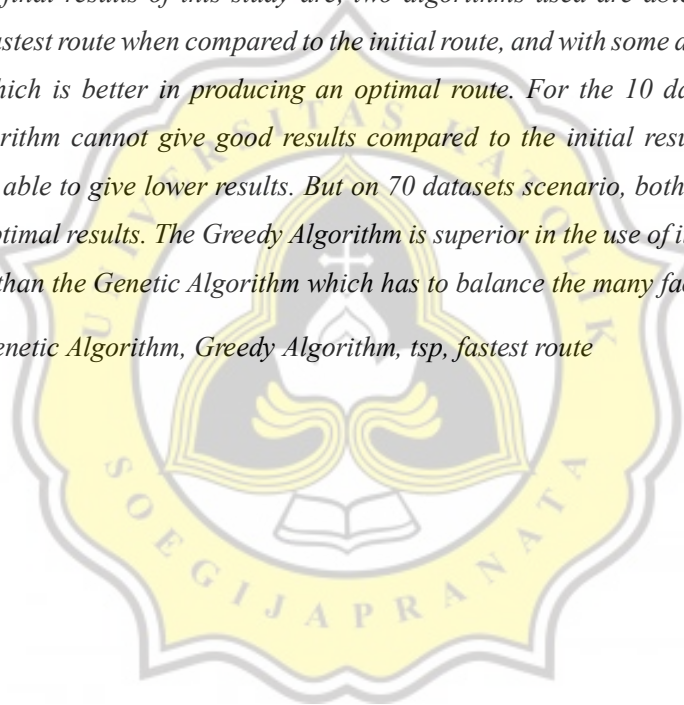


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