

## Decision Support System for Solving Multi-Objective Routing Problem

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**Abstract :** This paper presented a technique to solve one of the transportation problems that faces us in real life which is the Bus Scheduling Problem. Most of the countries using buses in schools, companies and traveling offices as an example to transfer multiple passengers from many places to specific place and vice versa. This transferring process can cost time and money, so we build a decision support system that can solve this problem. In this paper, a genetic algorithm with the shortest path technique is used to generate a competitive solution to other well-known techniques. It also presents a comparison between our solution and other solutions for this problem.

**Keywords :** bus scheduling problem, decision support system, genetic algorithm, shortest path

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