Abstract

Public transportation is one of urban transit that is rarely used as accommodation in the city of Bandung. One of the reasons for the lack of society's interest in using public transportation is the limited dispersion of public transportation's routes. As a result, public transportation's routes are not in line with passenger destinations because many areas have not been traversed by public transport. Therefore, in this final project, the optimization of public transport route is needed to solve several tracks in Bandung City. The method used in this study cases are the Firefly Algorithm and Tabu Search. To get the best optimal route by satisfy people's need of three stakeholders: The government (expand the scope of the road route traversed by public transportation), the driver (increasing the income) and the passengers (easy to get public transportation to reach its destination). In this study, the comparison between SK Walikota Bandung and the optimization of public transportation's routes result is dispersion by 60,58% and the driver of public transportation's income is increase by 20,03%.

Keywords: firefly algorithm, tabu search, public transportation routes, optimization