Abstract

*Modified Bi-Directional A * (MBDA *) is one variation of A * algorithm that can beused to solve shortest path problems. These Algorithms, able to produce good performance in solving the shortest path problem in comparison with A * in the search for more complex and a large number of nodes.*

*In this thesis, MBDA * algorithm is applied to solve the shortest path problem, but withadded functions, namely to find the middle node. So the search for solutions will be raised from the start to the middle node and followed by searching of the middle node to the goal node. The author gave the name search method with Dgraph-MBDA *. Expected with the addition of these functions, the process of finding the solution, more quickly than with MBDA * conducted in the normal way.*

*After testing it can be concluded that, by using Dgraph-MBDA * was the time the process of finding a solution more quickly than the MBDA *, but the algorithmDgraph-MBDA * is still not able to find the optimal solution, because it still stuck in the middle node will determine used as a divider graph into two parts.*

Keyword : *MBDA*, shortest path, Dgraph-MBDA**