

## ABSTRACT

In AI there are some techniques for problem solving that been used and one of them is planning. Planning is one of searching technique that is used in order that initial state can change to be a goal state. In planning there is hill climbing planner algorithm that combined heuristic search technique with planning. Heuristic that is used in this algorithm called heuristic additive. There are two methods in Planning, they are Forward Planning and Backward Planning. In Forward Planning, an action relevant with subgoal if at least one of its effect compatible with a subgoal. However, Backward Planning will proves goal achievement from the current state.

In this final project, have been implemented hill climbing planner algorithm with heuristic additive. This system will show steps chosen by the system to reach goal state, figure out some acts that have been done, and shows timing process that is needed by system to finish the problem.

From this final project's experiment is concluded that hill climbing planner algorithm can be worked until complexity fifhteen blocks. Backward Planning proved better than Forward Planning because of its ability to solve more problem than Forward Planning does. Hill Climbing Algorithm can't solved the problem where the state have a minimum heuristic and to reach a goal must act that can make a heuristic increased. The results of this algorithm compared with Graphplan Algorithm are optimal.

Keyword : hill climbing, solving by searching, heuristic additive, artificial intelligence, planning, Forward Planning, Backward Planning, blocksworld, goal state, initial state, Graphplan.