ABSTRACT

ARTIFICIAL INTELLIGENCE APPLICATION DEVELOPMENT TOOL LEARNING AND COMPLETION PROBLEMS IN THE EVENT (STATE AND SPACE)

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Problems of state space is one of the problems studied in the field of artificial intelligence. Problem discuss the state space of a space that contains all possible states. Criteria for this problem is identical to the problems of the place, and time conditions. One of the problems that are common in this state space is the Farmer's problem that can be described as follows, a farmer will take across a goat, a wolf and vegetables with a raft through the river.

Completion of this problem using a method first searches the search widened (Breadth-First Search), where in the step tracking solution using the shortest tree. In this method can be applied in a computer programming algorithm, so it can be created for a computer or application software that can help learning and solving problems of state space.

On this thesis, software or applications that are built applications designed to help scholars in the study and solve the problem state space case. Knowledge representation digunakanadalah decision tables, trees and tracking rules in the form of production rules of IF-THEN-ELSE. Search method using Breadh First Search.

Based on the results of testing, this application can help academics in studying and solving the problems the state space. Information is packaged in a simulation that produces a combination of display resolution and the end result is the final solution is reached.

Keywords *: artificial intelligence, problem state space, breadth-first search.*