

ABSTRACT

The development of the game industry, which is now growing faster, makes video games implement a lot of artificial intelligence as the content available. One of them is the application of existing pathfinding on Non-Player Characters (NPC). The applied pathfinding aims to make NPCs move from start point to destination. The application is of course programmed with the fastest route selection type.

The problems that occur in the selection of decisions by artificial intelligence in choosing the fastest route still often occur in modern games today. Therefore, research on the application of pathfinding algorithms in video games continues now.

With these problems, the authors use the A* algorithm as the route search algorithm implemented on the NPC. The authors found that 7 out of 10 route tests were successful and the A* algorithm's route finding could be increased by 9.2% by adding weight to the heuristics part of the algorithm.

Keyword: *Pathfinding, Algoritma A*, Unity, Non-Player Character*