ABSTRACT

The experience of playing a simple game certainly shared by everyone who uses both a game console and the traditional . Each game has its own rules that have been designed so that the game becomes interesting to play .

The author designed a 3D game tower defense titled Indonesian 's Flag Defense by using Finite State Machine for setting NPC behavior and Backpropagation Neural Network to determine the selection of the type of NPC that was sent to attack the headquarters of the player . FSM in this game is governing the conditions and the movement of NPC in order to attack the tower , take on slow bullet , poison bullet, and increase the attacks by raging.

Judging from the results of the research , Indonesian's Flag Defense has a view that is quite interesting and coupled with a Finite State Machine along with Backpropagation Neural Network not to make the game becomes monotonous . Application of the concept of Finite State Machine and Artificial Neural Networks go well in Indonesian's Flag Defense.

Keyword : Finite State Machine,Backpropagation , unity 3D