ABSTRACT

The development of the Game world from time to time continues to develop,

until now there are several Game genres emerging from text based to those that

have 3D animation. A Game not only develops on the interface, the Game's ability

to become an agent of learning makes a Game more alive. In-Game learning agents

are known as Artifical intelegent (AI). The AI was developed to design the behavior

of Non-Player Character (NPC) from Games or simulations as if the NPC had

intelligence and movement as natural as possible.

This study discusses making the movement of Non-Player Character NPC in the

Game using the Fuzzy algorithm method, so that we can determine the direction of

the movement of an NPC in the Game. The Game is made using the Unity 3D Game

engine, and determines the direction of its movement using FuSM. The results of

the FuSM implementation test on the NPC are adjusted to normal behavior, which

is moving towards the specified direction or the road is uncertain.

Keywords: Simulation, AI, NPC, Logic Fuzzy.