## ABSTRACT

Floods are natural disasters which have often occurred almost every year in Indonesia. Evacuation of flood victims still use conventional transport in the form of rubber boats. Therefore, the necessary equipment based transportation access to the latest technology to facilitate the evacuation of goods and flood victims. Additionally, by minimizing the amount of the rubber boat driver every budget can be in minimizing

In this final project is to design a means of transportation that is the navigation system in roboboat equipped with a camera monitoring the situation around and GPS (Global Positioning System) as a monitoring site located roboboat. All that is integrated with a PC (Personal Computer) that is used by the user. To anticipate the signals that lost time roboboat run then instilled AI (artificial intelligence) in the form of a method pathplanning and Fuzzy Logic Controller.

The results of the design it is very good pathplanning method when used as AI (artificial intelligence) navigation system error roboboat with the results of the average - average high of 0.9 meters of 3 different scenarios. Fuzzy Logic Controller also excellent in controlling the position roboboat input is the value of the angle of pathplanning method. Compass sensor into components that are very important to determine the success rate of the method roboboat pathplanning on the navigation system. Keywords: roboboat, lost signal, flooding

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