

ABSTRACT

Rapid electronic technological developments like this now intends for the sake of human survival. This technology is expected to facilitate and help minimize accidents for mankind. Generally, the use of technology most accidents happen on the highway. Some forms of accident can be affected by weather disturbing, for example, heavy rains can disrupt the driver's visibility when rainfall can not be washed properly. Wiper that functioned to assist users in achieving safe driving visibility often fail to meet the safety requirement. Changes in rainy conditions at various points makes this instability occurs. Wiper generally driven by a motor and set manually by the user so there instability motion.

On the occasion of this final project will be realized wiper models which works automatically according to rainfall. At the system will be designed a sensor that can read where rainfall is customized specifically to laying. The rain sensor will then be used as input for the rainfall data that is connected to the microcontroller. ATmega16 microcontroller that will be used is displayed on the LCD readout results 16x2. On the drive servo motors used for modeling the shape of the fan as a regulator of rain and limit switches are adjustable motion. To gain control of the appropriate use of Fuzzy Logic Controller method, this method is used as the output of a microcontroller based sensor insert. Hopefully, through this method of motion obtained a corresponding change in the motor and the more smooth and stable.

In this tool, controlling the motion of the fan rain (wiper) will use the method of fuzzy logic controllers. In the fuzzy logic method is obtained that the motor can be set according to the input from the rain sensor readings, although there is an error of 10%. But changes on the motor is stable and appropriate even when the dismissal was a little longer due to limited sensor readings and slowly ability.

Keywords: Wiper, Servo Motor, rain sensor, Fuzzy Logic.