

## Abstract

Overtaking is one of the factors that causes a big accident. Error of making decisions when overtaking can cause the driver to have an accident. To avoid this, a lot of research have been done to obtain the right way to reduce the risk of accidents when overtaking. One of the studies being developed at this time is to develop autonomous cars by utilizing the overtaking assistant system. In this study, a overtaking simulation will be built in an autonomous car like mobile robot. The robot model used is the Steering Wheel. This simulation aims to enable two robots to communicate with each other when one robot wants to overtake another robot, an ultrasonic sensor is used to measure the distance between robots. The protocol used here is by using fuzzy logic method.

*Keywords: Mobile Robot, Fuzzy Logic Method, Steering Wheel, Fuzzy Logic Controller*