ABSTRACT

Traffic accidents are fourth leading cause of death worldwide. One common type of accident is a rear-end accident. Technology Vehicular Ad Hoc Network (VANET) is one solution that is designed to address these issues.

This final project to create a simulation of the accident monitoring system to prevent accidents. Robot car using Arduino UNO as a controller and nRF24L01 as a radio to communicate with each other. When a robot car accident, then the car robot will send the data to the robot other cars. In the robot car that receives the data, it will alert the *Driver* and halting the vehicle.

From result of testing and analysis, mobile robot can receive data from the other mobile robot. Mobile robot can display the warning with *LED* and LCD then halting the vehicle. Minimum space between one to other mobile robot is 50 cm.

Keywords: VANET, Arduino UNO, NRF24L01, Rotary Encoder