

## **ABSTRACT**

This final project proposes a car speed monitoring system that utilizes android-based wireless communication. The monitoring system uses the Arduino Atmega328P microcontroller which is connected to the wifi module as a connection on Android and utilizes the solar cell as a receiver. Data detected by the laser will be processed arduino, then sent via nodemcu and the results will be displayed on the carspeed application on Android. The speed data obtained is processed using a database in real-time. Car speed monitoring system with Android-based wireless communication is applied to the miniature car with a distance between the face signal and the rear signal as far as 35 cm and can produce notifications of car speed on the display applied android in realtime and when the car speed exceeds the specified speed limit of 150 cm / s, the buzzer will sound. In an Android-based monitoring application there is a history of the detected car speed results.

Keywords: Speed, Microcontroller, Monitoring System, Android