ABSTRACT

Traffic accidents often occur due to the lack of readiness and awareness of drivers in making decisions when there is a dangerous situation while driving. One of the factors that causes accidents is violating the speed limit. Throughout 2018, out of 196,457 incidents, 73.49 percent of road traffic accidents involved motorcycles. In the process of collecting accident evidence, there is a possibility that the crime scene will change due to the gap in the arrival of the police to the scene. Therefore, a speed recorder system during an accident using this microSD was created to store accident data without being affected by the time gap in the arrival of the police to the scene.

This final project aims to create a system that provides accident data information according to the time of the incident and can speed up the investigation process. The system consists of a speed sensor lm393 as a motor speed reader, an Arduino Uno microcontroller as a system controller and a microSD as an accident data storage medium.

The LM393 speed sensor has an accuracy rate of 98.05% for RPM reading. The system can store speed data with a time delay of 5 seconds before the accident. The stored accident data such as motor speed, braking, collision direction, and accident time.

Keyword: Recording system, Speed, MicroSD, Accident data