Abstract

In this paper, this paper seeks an answer to the question: can a vehicle automatically report to the emergency units its position and speed when an accident is occurred? It presents an approach that relates to an accident detection and prevention system. It is particularly related to a system that sends a message to designated parties (such as vehicle owner and emergency helpers) when a certain speed has been detected and when an accident has been detected with a resulting speed below a certain threshold. The proposed system includes a microcontroller, modem, nock sensor, and speed selection box is used to send messages when a certain speed has been exceeded and when an accident has occurred and the resulting speed of the vehicle is less than a predetermined threshold. The message sent can be a text message sent over a GSM modem.

References

- White paper-"European Transport Policy for 2010: Time to decide";
European commission, Brussels, Belgium, December 2001,
   - A. Montague. (2004) "Direct dispatcher-less automatic vehicle to vehicle and non vehicle to vehicle police/emergency medical service notification system for life threatening accident, hijacking, thefts and medical emergency". US Pat. 6,642,844.
   - Conley. "Vehicle emergency alarm and stop system". USA patent No. 4067411. 1978.
System for Communicating a Vehicle Position and Speed during Accident


Index Terms

Computer Science
Communications

Keywords

Vehicle accident vehicle position GSM safety and PIC microcontroller.