Abstract

The system envisioned is an automatic collision detection and warning system relying on GPS module and a GSM modem. The vehicle to be safeguarded is to be fitted with the system sturdily ensuring good mechanical coupling with the entire chassis. In the case of an accident the system detects it using the fact that the vehicle would be suddenly decelerated in such a condition. An accelerometer continuously monitors the acceleration of the vehicle and will detect decelerations greater than threshold value and send the data to the microcontroller via an ADC. The controller compares this with the threshold set value and immediately sends an SOS message to preset numbers. With this message the controller also transmits the GPS coordinates of the vehicle which it continuously obtains from the GPS module. This system will highly aid the search and rescue of vehicles that have met with an accident.
References

- "GSM SIM 300 Module", Internet: www. positronindia. in, Product URL: http://positronindia. in/PT0006. aspx.

Index Terms

Computer Science  Circuits And Systems

Keywords

Embedded Microcontroller Accelerometer sensor GSM GPS