

WIRELESS BLACK BOX OF ACCIDENTAL MONITORING OF VEHICLES USING MEMS ACCELEROMETER, GSM AND GPS SERVICES

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Abstract

In this paper we develop a system that remove the delay between the moment of accident and Ambulance service to that accidental spot that get the valuable life to the accidental person.

The main intention of this paper is to find the accident spot at any place and intimating it to the ambulance using GSM and GPS Networks.

Introduction

In this fast moving insecure life, safety of life is so necessary. if an accident occur, here is system that is used for secure life. if an accident occur , there is GSM and GPS devices existed in a particular that vehicle. The GPS Antenna from GPS Module collect the information from GPS Satellite in NMEA (National Marine Electronics Association) Format, by using that information which is in NMEA Format GPS Trace the Exact location of an Accident. The same information given to the Microcontroller, Microcontroller sends this information of exact location to the operating station as well as family member of accidental person by using GSM Module. Operating station search the nearest hospital to the accidental spot, by using GSM Module operating station send this information to the nearest Hospitals Ambulance Driver by using that Hospital Unit.

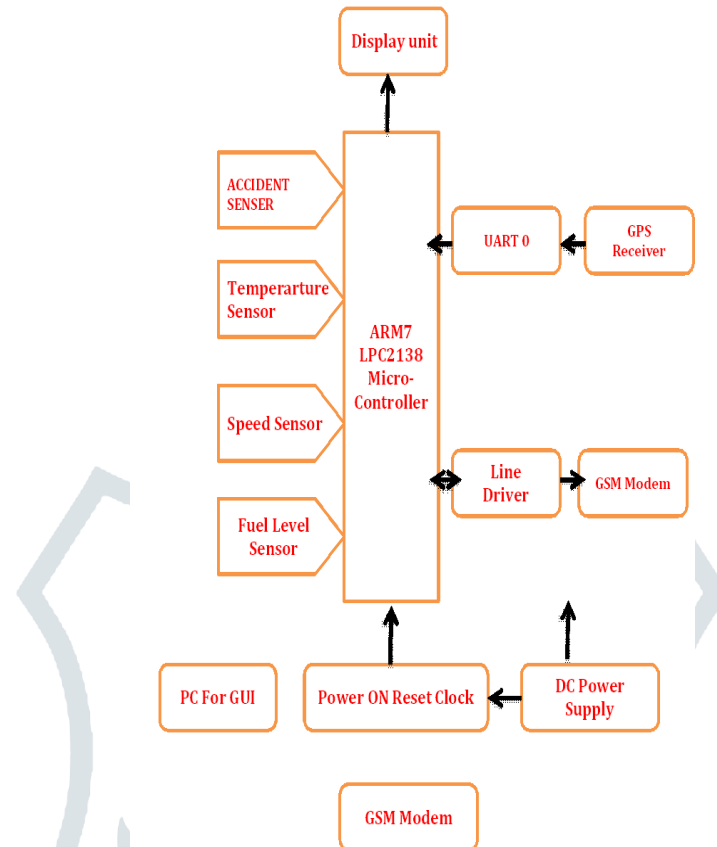
Motivation

In this paper we develop a system that uses GPS Technology, GPS Antenna from GPS Module collect the information from GPS Satellite and trace the exact location and information given to the Microcontroller. Also GSM Module, Temperature sensor, fuel level sensor, speedometer sensor are used in this Technology.

Objective

By using this technology Accident spot can be detected very soon, save the life of Accidental person by providing urgently medical services to it.

Proposed System



Block diag. vehicle section data acq. System and gsm/gps

Fig. Shows block diagram of data acquisition system, here accident sensor is also known as tilt sensor which indicates that in which direction vehicle is tilted at the time of accident, Temperature sensor indicates the temperature of vehicle at the time of accident, Speed sensor indicates that speed of vehicle at the time of accident, Fuel level sensor indicates the level of fuel of vehicle at the time of accident.

Conclusion

Thus we have studied that, by using this technology we know the exact location of an Accident very soon, because of this reason save the valuable life of Accidental person.

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