

## **GPS AND GSM FOR ACCIDENT SPOT IDENTIFICATION**

### **ABSTRACT**

Recently technological and population development, the usage of vehicles are rapidly increasing and at the same time the occurrence accident is also increased. Hence, the value of human life is ignored. No one can prevent the accident, but can save their life by expediting the ambulance to the hospital in time.

A new vivid scheme called Intelligent Transportation System (ITS) is Introduced. The objective of this scheme is to minimize the delay caused by traffic congestion and to provide the smooth flow of emergency vehicles. The concept of this scheme is to green the traffic signal in the path of ambulance automatically with the help of RF module. So that the ambulance can reach the spot in time and human life can be saved and the accident location is identified sends the accident location immediately to the main server.

The main server finds the nearest ambulance to the accident zone and sends the exact accident location to the emergency vehicle. The control unit monitors the ambulance and provides the shortest path to the ambulance at the same time it controls the traffic light according to the ambulance location and thus arriving at the hospital safely.

This scheme is fully automated, thus it locates the accident spot accurately, controls the traffic lights, provide the shortest path to reach the location and to the hospital in time.

### **EXISTING SYSTEM**

There is loss of life due to the delay in the arrival of the ambulance to the hospital in the golden hours. This delay is mainly caused by the waiting of ambulance in the traffic signals.

## **DISADVANTAGE**

- Locating the accident spot is not possible.

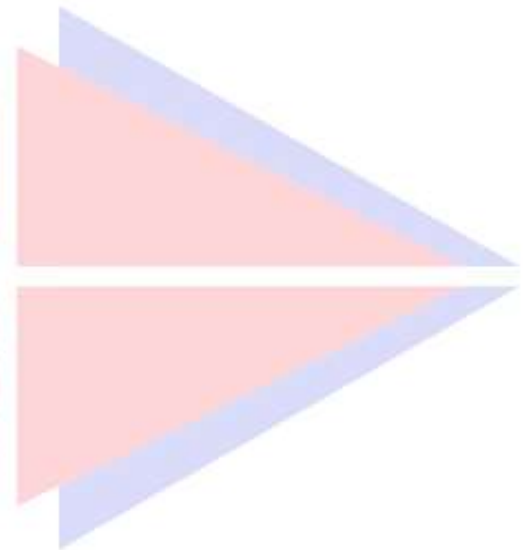
## **PROPOSED SYSTEM**

Our system consists of three main units which coordinates with each other and makes sure that ambulance reaches the hospital without any delay. This system is divided into following units,

- Vehicle Unit
- Main Server
- Hospital Unit

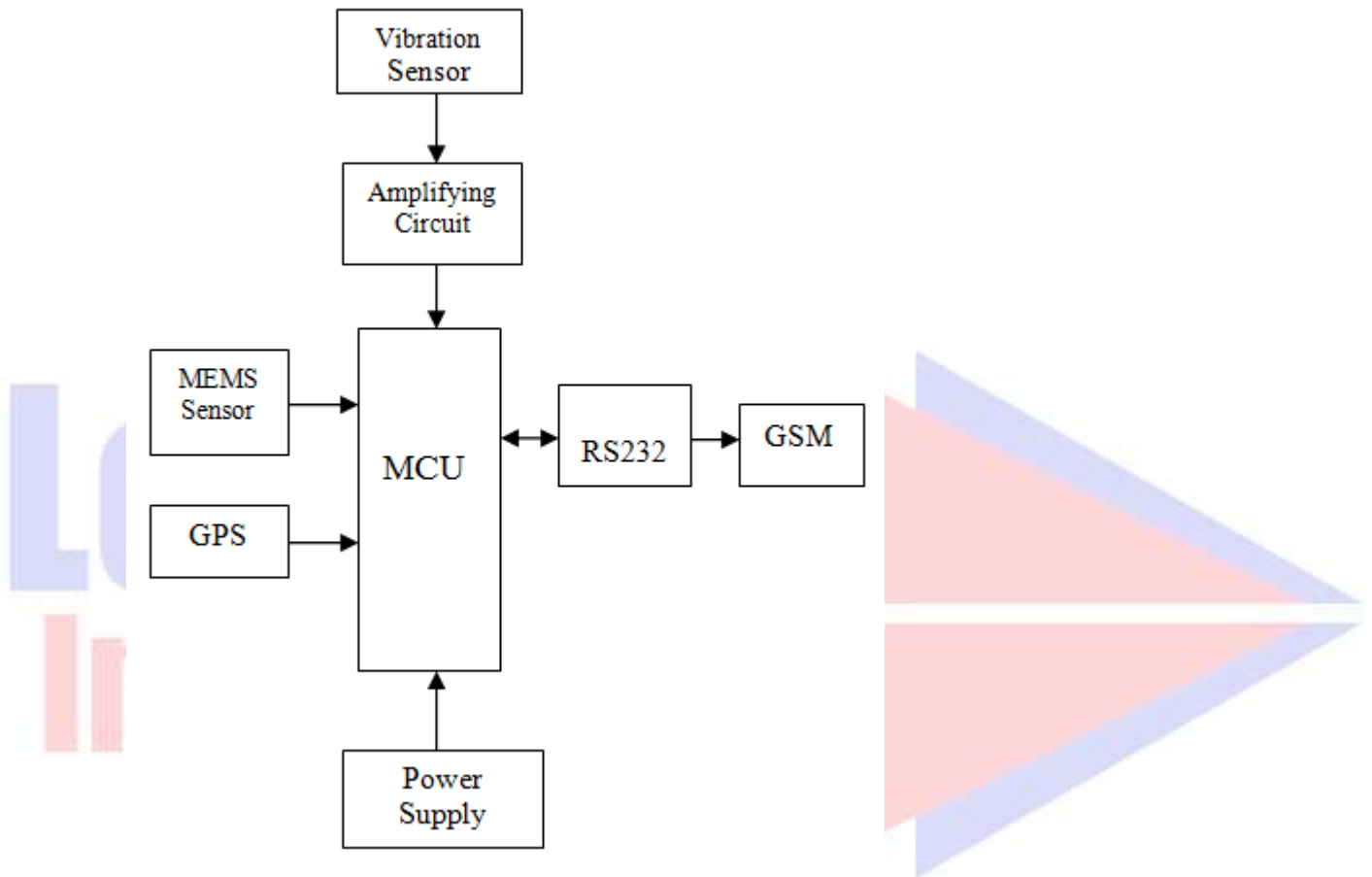
## **ADVANTAGE**

- Ambulance reaches the hospital without any delay
- recognize the missing vehicles

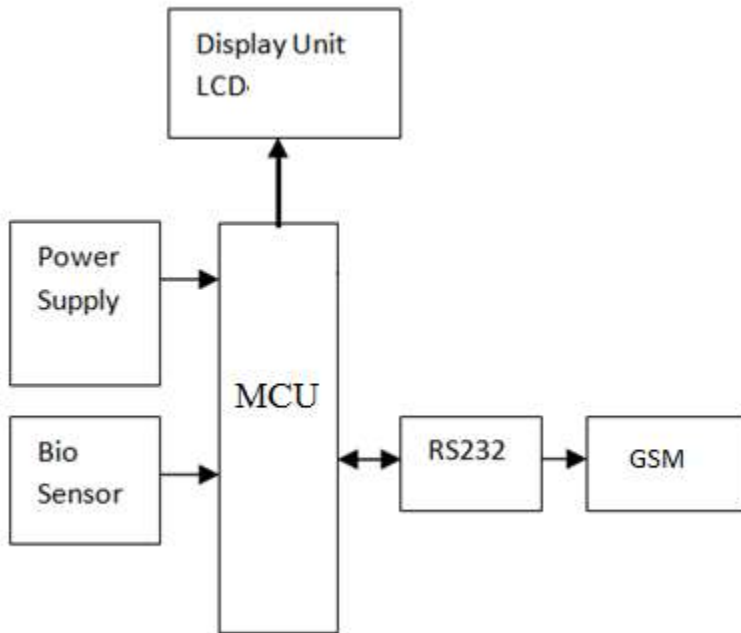


## BLOCK DIAGRAM

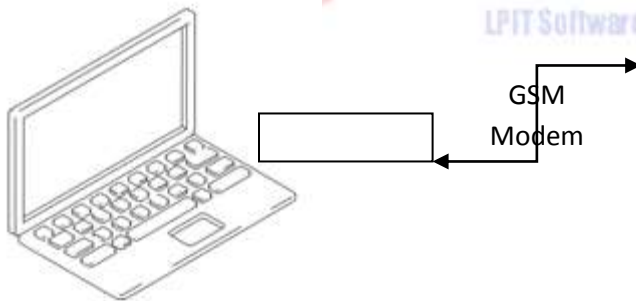
### 1. Vehicle Unit



## 2. Ambulance Unit



- **3. Hospital Unit**



## **HARDWARE REQUIREMENTS**

- Vibration sensor
- Microcontroller
- MEMS Sensor
- GPS
- GSM
- Power Supply
- RS232
- LCD Display
- PC

## **SOFTWARE REQUIREMENTS**

- MCU COMPLIERS
- PROTEUS SOFTWARE

MICROCONTROLLER may ATMEGA,8051,PIC OR Arduino