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Vehicle Speed Controller System

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ABSTRACT:

The main purpose of the "Automated Vehicles Speed Control System" is to make a better solution to reduce traffic jam and road accident. Every year, we find more and more road accidents due to increased traffic on the roads. Nowadays people are driving very fast accidents are occurring frequently, we lost our valuable life by making small mistake while driving. Driver are not to follow the traffic rule, road speed limit they want to drive fast and want to overtake other. By using this system we can effectively controls the speed of the vehicle in different zones. Our system automatically detect the road speed limit and then lock the vehicles speed that are same as road speed limit so that driver are not to increase the speed.

Keywords: Microcontroller (AT89S52), LCD Display, GSM Modem, GPS

Objectives:

The main objective of this paper is to design a System which will detect vehicle speed and control its speed accordingly to follow the road speed limitation. If traffic signal is red vehicles are stop automatic and if the signal is green the driver can drive

Introduction:

Vehicle tracking system main aim is to give Security to all vehicles. Accident alert system main aim is to rescuing people in accidents. This is improved security systems for vehicles. The latest like GPS are highly useful now a days, this system enables the owner to observe and track his vehicle and find out vehicle movement and its past activities of vehicle. This new technology, popularly called vehicle Tracking Systems which created many wonders in the security of the vehicle. This hardware is fitted on to the vehicle in such a manner that it is not visible to anyone who is inside or outside of the vehicle. Thus, it is used as a covert unit which continuously or by any interrupt to the system, sends the location data to the monitoring unit. When the vehicle is stolen, the location data from tracking system can be used to find the location and can be informed to police for further action. Some Vehicle tracking System can even detect unauthorized movements of the vehicle and then alert the owner. This gives an edge over other pieces of technology for the same purpose. Over speeding vehicle make lot of nuisance sometimes also leading to loss of lives and other damages. Also imposing speed restrictions through sign boards have been rendered fruitless wherein the vehicle drivers do not comply with it and resulting catastrophic. Vehicle Speed Limit Controller Project is a great solution to this problem as it not only provides speed limit. Once the vehicle detect the road speed limit driver can't increase the speed. Every year, we tend to discover a lot of road accidents due to increased traffic on the roads. Nowadays driver driving to quick and don't maintain the traffic rule therefore accidents are occurring usually. We lost our most important valuable life by creating tiny mistake whereas driving (school zone, hills area, and highways. So this system will be used to avoid such kind of accidents and to alert the drivers and to control their vehicle speed

Block Diagram:



Circuit Diagram:



Advantages:

- 1. The cost of the system will be very less compared with its application.
- 2. To help the passengers to cross the road safely without facing any danger from high speed vehicles.
- 3. This system helps to avoiding the rash driving of the drivers.
- 4. The vehicle will move only with the designed speeds corresponding to the zones
- 5. They reduce the risk of accidents.

Applications:

- It can be implemented in the city which has heavy traffic density.
- We can share any information about existence of the vehicle to the next vehicle.
- This technology can be implemented in any emergency cases like fire engine truck, VIP vehicles

Conclusion:

Speed is one of the most significant causes of an accident. Nowadays, GPS receiver has become an integral part of a vehicle. Besides using in other purposes, the GPS can also monitor the speed and detect an accident. It can use a very cheap and popular GSM modem to send the accident location to the Alert Service Centre. It can also send the last speed before accident which will helps to assess the severity of the accident and can initiate a voice call. Beside the automatic detection system, the vehicle occupant will be able to manually send the accident situation by pressing the Manual Detection Switch. A rescue measures in time with sufficient preparation at the correct place can save many lives. Thus, the proposed system can serve the humanity by a great deal as human life is valuable.

The system designed during this project will reduce rash driving and accidents up to somewhat and so will save several lives and many valuable properties. Rash driving within cities, inside the regions of college zones, villages that area unit almost the high ways in which and beside the high ways in which is prevented using this technique. This technique is value effective, because it use sensors and electronic parts, however instead uses simple system

Future Scope:

This system can be implemented in any vehicle for establish a communication. We can share the patient information to the hospital in an easy way. The information like break apply, speed of the vehicle or any failure, damage in the vehicle etc can share through a lifi system. The patient information can be shared to the hospital through lifi communication. Traffic signal timer can be controlled dependent on number of vehicle present in front of the ambulance

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