

Intelligent Traffic Safety Measures by Speed Checking of Vehicle on Highway in the School Zone With Over Speed Alert and Control

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Abstract: This project aims to monitor, alert and control the speed of any vehicles automatically in cities and also in restricted areas such schools, parks, hospitals and in speed limited areas etc. Now a days in a fast moving world people do not have self control, which leads to accidents. So it is difficult for the police to monitor all the accidents. This project provides a way to control the speed without harming others. Driver does not control anything during such places; controls are taken automatically by the use of electronic system. In this project we are using IR sensor for indicating the speed of vehicle, it is placed at the starting and end points of the restricted zones. Obstacle detectors are placed inside the vehicle.

The controller measures the speed identify the vehicle type and gives audio and visual alert to the near by public in the zone. If any body crossed the road close to vehicle then another system will turn off or lower the speed of that vehicle automatically to avoid accident case If speed is very high then information is transmitted to the nearest security staff, police station by the use of GSM.

From the advent of increased transportation, over speeding of vehicles has become one of the major causes for accidents and killing many lives. This project presents a system, developed for over-speed detection of the vehicle or human beings and alert corresponding persons by giving buzzer automatically and also sends messages to the traffic control station. Presently, RADAR gun or LIDARS are extensively used for over speed detection but it requires a person to pull the trigger for detecting the speed. In this work it has been proved that automation provides better performance than a human handled system. Simultaneously system is capable to detect audio violation by audio level measurement circuit and co, co2 pollution by the vehicle.

Keywords: IR Sensors, Arduino, LCD Display, Servo Motor, GSM Module

REFERENCES

- [1]. Solanki "Design of RF based speed control system for vehicles," International Journal of Advanced Research in Computer and Communication Engineering, Vol. 1, No 8,2012.
- [2]. Vinod Rao, Saketh Kuma, "Smart Zone Based Vehicle Speed Control Using RF and Obstacle Detection and Accident Prevention," International Journal of Emerging Technology and Advanced Engineering, Vol.4, No.3, 2014.
- [3]. Gummarekula Sattibabu, Satyanarayan, "Automatic Vehicle Speed Control With Wireless In-Vehicle Road Sign Delivery System Using ARM 7," International Journal Of Technology Enhancements And Emerging.
- [4]. Deepa B Chavan, Abdul Rahim Makandar , "Automatic Vehicle Speed Reduction System Using Rf Technology," International Journal of Engineering Research and Applications, Vol.4, No.4,2014.
- [5]. Jyothi Kameswari, Satwik, "A Design Model for Automatic Vehicle Speed Controller," International Journal of Computer Applications, Vol.35, No.9,
- [6]. S. Sheeba Rani, R.Maheswari, V.Gomathy and P.Sharmila "Iot driven vehicle license plate extraction approach" in International Journal of Engineering and Technology(IJET) , Volume.7,pp 457-459, April 2018 .

- [7]. A.Vengadesh , K.Sekar, “AUTOMATIC SPEED CONTROL OF VEHICLE IN RESTRICTEDAREAS USING RF AND GSM” - International Research Journal of Engineering and Technology(IRJET) Volume: 02 Issue: 09 | Dec-2015. .
- [8]. K. Dasaradharami Reddy, S. Mohanraju, Dr.A. JebarajRatnakumar, Dr.S. Balakrishnan,“Querying and Searching of Friendship Selection in the Social IoT, Jour of Adv Research in Dynamical & Control Systems. Vol.10, 11-Special issue, 2018, pp. 910- 914.