

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“JnanaSangama” Belagavi – 590 010



PROJECT REPORT
ON
“SPEED CONTROL OF VEHICLE IN ACCIDENT
ZONE”

Submitted in partial fulfillment of the requirements for the award of the degree

BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

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ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

MOODBIDRI – 574 225.

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CERTIFICATE

Certified that the project work entitled “**SPEED CONTROL OF VEHICLE IN ACCIDENT ZONE**” is a bona fide work carried out by

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in partial fulfillment for the award of BACHELOR of ENGINEERING in ELECTRONICS & COMMUNICATION ENGINEERING of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2017–2018. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering degree.

 19.05.18

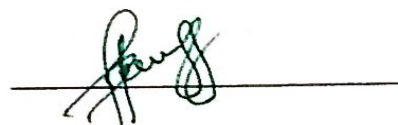
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ABSTRACT

Every year the density of vehicles are increasing rapidly, which results in more traffic related problems, leading to accidents. The causes for the accidents are over speeding and negligent driving and ignoring the road rules etc. These problems can be solved by using a system which alarms the accident zone or speed limit area, in response to these alarms the speed of the vehicle can be controlled in order to, avoid the accidents. The system can be implemented by using two methods such as Radio Frequency (RF) communication and Geo-fencing. The proposed system is an attempt to control the speed of the vehicles, which is designed with software and hardware to enable the driver to get the speed of the area in which the vehicle is currently moving. The main focus of this project is to provide safety and precaution to the driver as well as to the passengers and to avoid the accidents which can save many lives.

The framework makes utilization of two methods which are mentioned earlier. In RF communication method RF transmitter placed at accident zones (such as school zones, hospital areas and speed limit areas etc.) and RF receiver placed in the vehicle will communicate using electromagnetic waves. The microcontroller that is the brain of the project activates the particular action corresponding to the received signal. The prototype is implemented using geo-fencing technology to overcome from drawbacks which are encountered in RF technology. Geo-fencing is a feature in software /program that uses the global positioning system to define the geographical area with different radius. In geo-fencing method, the software application provides an alert or notification to the controlling part of the system when the vehicle enters an established geo-fenced area. The microcontroller in the controlling part will perform the necessary action based on the notifications. In the Geo-fence system there are not much complicated issues of power supply, system installation to vehicles. The location of the vehicle should be uploaded for each and every second. Therefore geo-fencing provides more accurate and efficient results compared to RF technology.