



PANIMALAR ENGINEERING COLLEGE

Chennai – 600 123

Department of Computer Science & Engineering

CS 8811 - Project Work (2022-23)

ZEROth REVIEW FORM

TITLE OF THE PROJECT

AUTOMATIC SPEED CONTROL IN SCHOOL AND COLLEGE ZONES

ABSTRACT :-

As far as automobiles are concerned, safety is very important to reduce the occurrence of accidents in speed restricted zones. It minimizes the loss of property and life. According to the recent surveys, in the past few years, an accident near the school zones, hospital zones and sharp turnings have increased tremendously, because of their hurry to get the targeted place soon. Therefore controlling vehicle speed has been a crucial issue to be considered. This paper aims to give a practical, compact and simple design to develop an automatic vehicle speed control system, which has to be quickly get implemented in school, college, hospital, sharp turning zones to reduce the number of accidents. This paper paves way for controlling the speed of the vehicles within certain limit in restricted zones without interruption of the drivers. An RFID is used for this purpose. The RFID reader is attached along with the vehicle and the RFID Tag with these Zones. The tags are placed at the beginning and the end of the regions for which the speed should be reduced. This automated speed controlling system is built using the microcontroller-based platform of the Arduino Uno board. Here the Once this technique was implemented the accidents will be reduced on a larger rate, and also reduce the nuisance by some drivers.

TECHNOLOGY :-

- Arduino UNO,
- At mega 30028p processor,
- Bluetooth, RFID radar,
- No of RFID tags,
- LCD monitors,
- motor driver,
- 2 dc motors and 1 buzzer,
- robotics chasis,
- C/C++ Programming Languages

LIST OF REFERENCES :-

- [1] Kalpana seelam, Ch.Jaya Lakshmi “An Arduino based Embedded System in Passenger Car for Road Safety” International Conference on Inventive Communication and Computational Technologies (ICICCT 2017).
- [2] Sanket Jhunjhunwala, Harshit Gahlaut, Harish Ranjan Singh, Ripu Daman, Kamlesh Pandey “ Driver soberness system for road vehicles ”2017 International Conference on Computer, Communications and Electronics (Comptelix) Manipal University Jaipur, Malaviya National Institute of Technology Jaipur & IRISWORLD, July 01-02, 2017
- [3] D.Bindu Tushara, Dr. P.A.Harsha Vardhini “Wireless Vehicle Alert and Collision Prevention System Design using Atmel Microcontroller” International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT) – 2016.
- [4] D.Guru Pandi, J.Navarajan, R.Vishal, D.Vibuvasan “ Embedded based accident prevention technique using image processing” IJARIE-ISSN (O)-2395-4396, Vol-2 Issue-2 2016
- [5] Y M Jagadeesh, G. Merlin Suba, S Karthik, and K Yokesesh “Smart Autonomous Traffic Light Switching by Traffic Density Measurement through Sensors” 2015 International Conference on Computers, Communications, and Systems 978-1-4673-9754-4/15
- [6] M. Ashwin Kumaar, G. Akshay Kumar S.M. Shyni “ Advanced Traffic Light Control System Using Barrier Gate andGSM ” 2016 International Conference on Computation of Power, Energy Information and Communication (ICCPEIC)
- [7] Lea Angelica Navarro, Mark Anthony Diño, Exechiel Joson, Rommel Anacan, Roberto Dela Cruz “ Design of Alcohol Detection System for Car Users thru Iris Recognition Pattern Using Wavelet Transform ” 2016 7th International Conference on Intelligent Systems, Modelling and Simulation 2016
- [8] Aniket D.Sathe1 Vivek DeoDeshmukh2 Advance Vehicle-Road Interaction and Vehicle monitoring System using Smart Phone Applications” 2016 Online International Conference on Green Engineering and Technologies (IC-GET).

[9] K.Govindaraju, S.Boopathi, F.Parvez Ahmed, S.Thulasi Ram, M.Jagadeeshraja “Embedded Based Vehicle Speed Control System” Using wireless technology” international journal of innovative research in electrical, electronics, instrumentation and control engineering ,Vol. 2, Issue 8, August 2014.

[10] B. Papachary , P. Vamshidhar Reddy , T. Madhavi “ Vehicle Tracking and Prevention of Road Accidents by using RFID Technology” International Journal of Engineering Inventions e-ISSN: 2278-7461, p-ISSN: 2319-6491 Volume 1, Issue 12 [December. 2012] PP: 98-101.