**OBSTACLE DETECTOR USING ULTRASONIC SENSOR**

ASHUTOSH YADAV

(1807259)

**ABSTRACT**

This report details the implementation of obstacle detector system using ultrasonic sound waves.

Obstacle detection techniques is now the future of smart vehicles with the safety measure and for the visually impaired individuals in the unfamiliar conditions.The technical idea is to transfer and develop a local navigation system with help of several types of equipment and approaches namely sensors, Computer Vision methods, micro-controllers etc. for detecting obstacles in the path. To enable an utmost collision free mobility of the users we intend to use Ultrasonic sensors as its less expensive and easily accessible.

In this project we focuses on the uses of these sensors in distance measurement in vehicular applications and a small prototype designed using arduino , to provide a practical experience with simulation too.

**INDIVIDUAL CONTRIBUTION AND FINDING**

Objective of this project was to learn and simplify the use of obstacle detection system as a economic use, with the help of arduino algorithm and design a prototype with the simulation part too for virtual explanation.

I have take help from various research papers,sites and referred youtube videos which guided me in making the project. With all knowledge gathered from the research we looked for appropriate hardware that was needed to do project, with a easily understandable software platform for simulation.

**INDIVIDUAL CONTRIBUTION TO PROJECT REPORT PREPARATION**

I have provided the info. and video reference to the member working on the making of combine report of the project.The report consist of 7 chapters, containing data referred from the group members. **s**

**INDIVIDUAL CONTRIBUTION TO PROJECT PRESENTATION AND DEMONSTRATION**

I have done the Working part of the presentation of the PPT. Working section includes the explanation of the basic of the sensor calculation’s and formula applied in measuring distance from obstacle

**Digital Signature Digital Signature**

Full Signature of Supervisor/s: Full signature of the student

