Team Name: InfoMech

Scope of Project: SOCIAL GOOD

Team Members Name:

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Problem Statement:

Distance Based Accident Avoidance System Using Ultrasonic Sensor and Electromagnetic Repulsion.

Solution Statement:

The aim of the model is to prevent the collision of vehicles by using ultrasonic sensors interfaced with Arduino UNO to calculate the distance between the vehicle and the obstacle and to prevent collision using the auto break system and also by using the theory of electromagnetic repulsion. The proposed system comprises an idea of having safety while driving. By the study of hypothesis on ultrasonic sensor, we come to know that it uses sonar waves to calculate the accurate distance between two objects. By using the above feature of ultrasonic sensor we apply automated brakes and we also use the theory of electromagnetic repulsion to prevent accidents.

Software Requirement: Arduino, Arduino Bluetooth RC Car, Arduino Voice Control.

Hardware Requirement: HC-SR04 Ultrasonic Distance Sensor Module, HC-05 Bluetooth Module With TTL Output, Arduino UNO, LED lights, Jumper wires, L298N Motor Driver, RC Car Chassis, Lead Acid Battery 7Ah, DC Geared Motor 200RPM, Wheel 110mm.