

Smart Braking System

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Abstract: *Now-a-days accidents are mostly caused by delay of the driver to hit the brake or by the negligence by the driver. The project aims to develop a prototype system that offers a collision functionality in production vehicle, a system which can operate automatically with the help of high-profile sensors based on relay circuit and some changes in traditional braking system and apply the brake automatically in emergency situation. The resulting system can achieve measurements with high accuracy and improved short distance measurement also. This distance measurement is used to control smart braking system for safety applications. The brain of the system part can be developed on Arduino Nano microcontroller. The Ultrasonic sensors are the eyes of this system, which are cheaper and the system comprises of a less demanding hardware. The braking is done with the help of 3/2 solenoid valve which actuates brakes and clutch.*

Keywords: Ultrasonic Sensor, Processor (Arduino Uno), Intelligent Braking System (IBS), Antilock Braking Systems (ABS), Microcontroller, etc.

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