

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI



A Project Report on
(Sponsored by KSCST)
“ADVANCED ACCIDENT AVOIDANCE & IDENTIFICATION SYSTEM
FOR AUTOMOBILES”

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ABSTRACT

The objective is to efficiently avoid the collision of automobile vehicles and to provide a greatest security to the users in adverse weather conditions by using Collision Avoidance System (CAS). Adverse weather conditions being one of the reasons for accidents. Hence a systematic architecture is being proposed to avoid the early accidents, which most possibly occur due to bad weather conditions and asynchronous speed among the vehicles. Here, the relative speed and distance of all the vehicles around a particular vehicle is estimated using IR sensors and Ultrasonic sensors and based on those results the speed of that particular vehicle is controlled to avoid early collisions.

A new vivid scheme called Intelligent Transportation System (ITS) is introduced. The objective is to minimize the delay caused by traffic congestion and to provide the smooth flow of emergency vehicles and to automatically change the traffic signal to green light when the ambulance is passing with the help of RF module so that the ambulance can reach the accident spot on time. The GPS and GSM that are interconnected and are present globally as well as in the vehicle will detect the accident occurred zone and will send a message to the pre-defined numbers. This scheme is fully automated, thus it locates the accident spot accurately, controls the traffic lights, provide the shortest path to reach the location and to the hospital in time.