Car Accident Detection System And Alert

Prof. Samgir K. R. A[1], Shivani S. Kolate[2], Madhuri S. Dixit[3],
Prajakta D.Dhaygude[4], Samruddhi M. Deshmukh[5]

Professor, Department of Computer Science and Engineering[1]
Students,DepartmentofComputerScience&Engineering[2,3,4,5]
Navsahyadri Education Society's Group of Institutions, Polytechnic, Pune, Maharashtra, India

Abstract: *The Car Accident Detection System and Alert is an innovative, Arduino-based safety solution designed to enhance road safety by providing real-time accident detection and alerts. This system employs a combination of advanced technologies to ensure swift response and assistance during emergencies. It integrates limit switches placed in critical areas of the vehicle to accurately detect sudden impacts indicative of a collision. Upon detecting an accident, the system leverages GSM technology to instantly send accident alerts, along with the vehicle's live location information, to predefined emergency contacts, enabling rapid assistance. The inclusion of GPS enhances the accuracy of location data, ensuring real-time updates on the vehicle's whereabouts. Additionally, ultrasonic sensors are incorporated to detect obstacles in the vehicle's path, helping prevent secondary accidents by alerting drivers to potential hazards. The system's comprehensive design, powered by the Arduino platform, ensures seamless integration of these features for a robust safety solution that not only promptly notifies emergency contacts of accidents but also contributes to collision prevention through obstacle detection, ultimately fostering a safer driving environment..*

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