

# **IOT-based Accident Detection and Alert System**

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**Abstract:** Speed is the one of the basic reasons for vehicle accident in India. To reducing the accidents the system is used that is 'Accident Detection and Alert System'. This system alert when accident occurred and immediately contact to the emergency unit. Arduino UNO is processor of this system. It control the whole system. The input are Acceleration meter, Gyroscope, Vibration Sensor and output are LCD, Buzzer, GSM module, GPS module. When accident occurred their vibrations are detected by vibration sensor and accelerometer detects sudden changes in speed that may indicate an accident or crash. Gyroscope monitors changes in orientation or rotation of the vehicle, which can be useful for detecting rollovers or sudden swerving. GPS module provides real-time location data, which is useful for sending SMS of accident locations to emergency unit. GSM module get accident location and data send it to emergency unit. And Buzzer get ON and LCD display danger message.

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