**SMART ROAD CROSSING INDICATOR OVER IOT**

**ABSTRACT:**

The main objective of this project is to develop a “SMART ROAD CROSSING INDICATOR OVER IOT”. The number of accidents happened in India. And this rate is highest in the world. The actual number of accidents may be higher than documented. One person dies in every 4 min.

In India nowadays safety on roads has become a serious issue as well as all over in the world. At some places accidents occur like crossings, diversions on highways. So we are developing this project to reduce the problems occurred while crossing the roads.

In this project we are using arduino UNO as a controller which is the heart of this project also we are using Hall Effect sensors, ultrasonic sensor, buzzer, LCD display and Wi-Fi module. The accidents on highways can be prevented by understanding the psychological state of driver. A smart system for accident prevention is an ideal concept for smart roads. It is a project with innovative ideas for safety on roads and highways.

If any obstacle passes from ultrasonic sensor it is not detected as vehicle because it may be anything, so to recognize the vehicle we are used hall effect sensor because it sense the proximity sensing, positioning, speed detection, magnetic field and current sensing applications. So if an only if vehicle passes through Hall Effect sensor then it is detected as vehicle is passed away. From both the ultrasonic1 and Hall Effect sensor1 detect the vehicle then it will indicated by red led and buzzer will beep. Also all the data send over IoT.

**BLOCK DIAGRAM:**

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