

**AUTOMATION OF LEVEL CROSSING SYSTEM USING ARDUINO
UNO**

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ABSTRACT

The objective of this project is to control the railway accident due to carelessness of manual operation. So, we design an Automatic control of railroad crossing system using Arduino UNO (Microcontroller), Ultrasonic sensor, Speaker, LED, Buzzer and Servo motor, in order to control the gate. We design the project for dual line level crossings. i.e., the train can arrive either in forward or reverse direction on any of the tracks, the sensor detects and sends the control signal to the microcontroller by which, the opening and closing operation of the gates are being controlled. The sensors are designed to monitor the activity 24/7. If any malfunction occurs, it is sensed by the feedback loop and we can fix the problem successfully. The Sensors, Speaker, LED, Buzzer are implemented on basis of the calculated range to alert the approaching of train.

Keywords— Arduino UNO, Ultrasonic sensors, Servomotors, Speaker, LED's, Buzzer, GSM Module.


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