

Automatic Accident Control Systems on Railway Tracks for Indian Railways

Aiswarya

Department of Software Systems, K G college of arts and science, Coimbatore

ABSTRACT

In India accidents at the unmanned level crossings are high. The obstacle on track are increasing which leads to accidents. No steps have been taken so far in these areas. Our project deals with automatic railway gate control at level crossing replacing the gates operated by the gatekeepers and detection of obstacle on track by employing the automatic railway gate control at the level crossing and the arrival of the train is detected by the sensors placed in the side of the tracks. Hence, the time for which it is closed is less compared to the manually operated gates. Detection of obstacle on railway track deals with two things, Firstly it senses any obstacle on the track by using sensors placed in the track and Secondly, to convey the obstacle detection message to the loco pilot using RF sensor and to the control room using GSM and to the public by a buzzer sound. The proposed system uses IR sensors to detect the arrival and departure of trains at the railway level crossing, ultrasonic sensor to detect the obstacle on the track, RF Transmitter to convey the obstacle message to the nearby railway station and RASPBEERY PI to control the opening/closing of gates and to convey the obstacle message. This motivated us to take up this project.

