Abstract

The road and rail accidents are increasing with the advancement of human errors. Majority of the level crossing positions are not guided by any accident preventive mechanism and even not accompanied by a skilled person. This paper presents an automatic rail gate control system at level crossing positions and accident prevention mechanism. Two vibration sensors are used to control the open and close state of the gate at level crossing position. An ultrasonic sensor is positioned to detect an unauthorized object on the track. Open and Close status of the gate and unauthorized object on the track will be communicated with the central control room using wireless communication protocol. The experimental results proved the proposed mechanism is a prudent approach to safeguard the human and to curtail the train accidents.

References

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**Index Terms**

Computer Science  
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**Keywords**

Rail gate  
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ultrasonic sensor.