

Automatic Gate at Railway Platform using Embedded System

R. Ramesh, B. Raveena, Ch. Ravali, MD. Abdulnabi, B. Raju

Assistant Professor, Department of Electronics & Communication Engineering,

UG Students, Department of Electronics & Communication Engineering,

ChristuJyothi Institute of Technology and Science, Jangaon, Telangana, India

Abstract: Ensuring passenger safety and optimizing operational efficiency are paramount concerns for railway systems worldwide. The deployment of an automatic gate system at railway platforms emerges as a pivotal solution. This paper proposes the design and implementation of an innovative automatic gate system tailored to railway platforms, aimed at enhancing safety protocols and streamlining passenger flow. The automatic gate system integrates cutting-edge technologies such as sensors, actuators, and machine learning algorithms to detect and respond to passenger movements in real-time. By employing infrared sensors and computer vision techniques, the system accurately identifies individuals approaching the platform edge, thus mitigating the risk of accidents and unauthorized access to restricted areas. The efficiency and safety of railway platforms are paramount for the smooth functioning of any railway system. With the burgeoning urban population and increasing passenger traffic, the need for automated gate systems has become imperative. The proposed AGS integrates cutting-edge technology to enhance passenger experience and streamline platform operations. Utilizing sensors, actuators, and a central control unit, the system facilitates seamless entry and exit of passengers while ensuring safety and security.

Keywords: AGS

REFERENCES

- [1] Vikrant Bhateja; Amit Joshi; Suresh Chandra Satapathy, "Proceedings of the International Conference on Data Engineering and Communication Technology", Springer, 2017.
- [2] Paula Fraga-Lamas, Tiago M. Fernández-Caramés, Luis Castedo, "Towards the Internet of Smart Trains: A Review on Industrial IoT Connected Railways", Sensors 17, June 2017.
- [3] Aleksandra Simic, Ognjen Koci, Milan Z. Bjelica, Milena Milosevic, "Driver monitoring algorithm for advanced driver assistance systems", 2016 24th Telecommunications Forum (TELFOR), Belgrade, Serbia.
- [4] Enrique Moral-Benito, "Bayesian posterior prediction and metaanalysis: An application to the value of travel time savings", The Annals of Regional Science 48, January 2009.