MEENAKSHI COLLEGE OF ENGINEERING

B.TECH-INFORMATION TECHNOLOGY

INTERNET OF THINGS

LITERATURE SURVEY

SMART SOLUTIONS FOR RAILWAYS

TEAM ID PNT2022TMID27787

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PAPERS	PARAMETER	DESCRIPTION
1.Base paper	**1.Aim**: To implement smart solutions and failure management strategies for Indian railways based on IOT. **2.Abstract:** In order to overcome the current fractured ecosystem that monitors and controls railways functionalities, the adoption of a novel integrated approach is mandatory to create an all-in-one railway system. In our analysis, we aim at studying possible failure management strategies on rail-road switches to improve the level of reliability, crucial requirement for systems that demand maximum resiliency as they manage a critical function of the infrastructure. **3.existing system:** With the help of AI technology and the Internet of Things,we can conveniently achieve the function of train operation monitoring, track condition detection, accident forecast and warning, as well as	Railways monitoring and control are currently performed by different heterogeneous vertical systems working in isolation without or with limited cooperation among them. Such configuration, widely adopted in practical deployments today, is in contrast with the integrated vision of systems that are at the foundation of the smart-city concept. In order to overcome the current fractured ecosystem that monitors and controls railways functionalities, the adoption of a novel integrated approach is mandatory to create an all-in-one railway system. To this aim, new IOT - based communication technologies, like wireless or Power Line Communication technologies, are considered the main

	railway accident analysis system ,which can monitor and adjust the train movement in real time. **4.proposed system:** In particular, we propose a set of solutions aimed at detecting and handling network and sensor failures to ensure continuity in the execution of the basic control functions. The proposed approach is evaluated by means of simulations and demonstrated to be effective in ensuring a good level of performance even when failures occur **5.advantages:** 1. good level of performance 2. find appropriate data. 3. Railways monitoring and control are ensure even failures occur. **6.Disadvantage:** 1. High maintenance of dataset 2. Complex to control.	enablers to integrate in a very rapid and easy manner existing vertical systems. In this work, we analyse the architecture of future railways systems based on a mix of wireless and Power Line Communication technologies. In our analysis, we aim at studying possible failure management strategies on rail-road switches to improve the level of reliability, crucial requirement for systems that demand maximum resiliency as they manage a critical function of the infrastructure. The proposed approach is evaluated by means of simulations and demonstrated to be effective in ensuring a good level of performance even when failures occur.

2.Reference paper-	**1.Existing system:** The Smart Platform will open when there is no train arriving at the station. The smart interface can be used for visually disabled people to cross between platforms. On both sides of the road, proximity sensors and the camera unit are configured. If the train hits one sensor, the signals will be transmitted to the camera unit, the image will be captured further by the camera, and the CNN algorithm will decide whether the image captured is some other image of the train. **2.proposed system** The research builds a railway traffic data collecting and analyzing system based on C#, with the help of Cheat Engine, Microsoft Access and Visual Studio 2010. The system can automatically track and analyze the traffic data from Microsoft Train Simulator. This reproduction procedure is with great significance for analyzing the real accident	**Advantages:** Rail traffic accident reproduction system and accident avoidance are achieved .It provides the best response without using foot over bridge for the travel of physically disabled people from one platform to another platform. **Disadvantage:** Very expensive, computationally complex little mistake can cause fatigue problem.

	in an Artificial Intelligence way, as well as providing a broad prospect for the practical application of block chain technology.	

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