

## SMART RAILWAY SOLUTION

S.No	TITLE	JOURNAL	AUTHOR	CHALLENGES/ FUTURE WORK
1	Planning, Analysing and Designing of Smart Railway Station	International Journal of Creative Research Thoughts (2020)	Soundappan.S,S rimaan.R, Venatesh.G, Sriram.M.	The journal describes about implementation for one particular junction.
2	Authentication System for Smart Railway Station	International Journal for Modern Trends in Science and Technology (2018)	Swati R.Khokale, Vaibhav U.Bunde, Shweta B.Karande, Shyam Ingale, Mayuri Ghaywat.	<ul style="list-style-type: none"> <li>➤ The authentication system focused on providing platform tickets through web app.</li> <li>➤ This leads to paper less tickets and helps to reduce crime in the platform.</li> </ul>
3	Smart Railway Crossing using Microcontroller.	International Journal of Engineering Research & Technology (2020)	Sushant M.Gajbhiye, Raju A.Bondre, Zen P.Raut.	The objective of the research was to handle and control the system of railway gate by applying microcontroller.
4	Autonomous Rail Track Inspection using Vision Based System.	International Conference Computer Intelligence.	M.Singh, S.Singh, J.Jaiswal, J.Hempshall.	<ul style="list-style-type: none"> <li>➤ Automatically recognizes video sequence clips.</li> <li>➤ Can't link together disconnected pixels.</li> </ul>
5	Rail Crack Detection based on the adaptive noise cancellation method of EMD at high speed.	IEEE International Instrumentation and Measurement Technology Conference	Xin Zhang, Yan Wang, Kangwei Wang, Yi Shen.	Signals at different speeds are investigated by the proposed method and the interference of noise signals is suppressed effectively.

6	Safety verification for train traffic control communication	IEEE journal on selected areas in communication (2012)	G.Tarnai	A safety connection between train and trackside is established using a safety communication protocol.
7	Ultrasonic characterization of defects in rails.	Insight-Non-Destructive Testing and Condition Monitoring (2002)	R.Clark, S.Singh, C.Haist	An alternative to electrical scanning and continuous beam steering was proposed using
8	Passenger Monitoring Model for Easily Accessible Public Trams/Trains	12 <sup>th</sup> International Conference on Engineering/ Electronics, Computer , Tele-communication and Information Technology (2015)	Roman Khoemblal, Teeravisit Laohapensaeng, Rounsang Chaisricharoen.	<ul style="list-style-type: none"> <li>➤ A single public transportation card was used to travel throughout the country.</li> <li>➤ Applicable only for passenger monitoring.</li> </ul>