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(57) Abstract :

India positioned second largest railway transportation sector in Asia covers approximately 66,687 kms of route length with 11,000 trains. Indian railway faces massive challenge to manage waste overthrown on the railway tracks. The wastes been generated from various sources including station stores, disposal of food wastes from pantry and human faeces. Tainted railway tracks and stations spread various diseases to its passengers, workers and people living nearby tracks and stations. No technologies have implemented to clean the waste left over on the railway tracks. As of now, the Indian railways depend on manual scavenging process by collecting wastes. This type of cleaning is not advised since it spoils scavenger™s health. In this invention, a novel low cost less weight bot machine is introduced to clean the wastes overthrown on the railway tracks with the help of trained cameras. This camera trained by novel algorithm to identity particular wastes available on the tracks. A high power blower used in this bot sucks wastes which is identified by the trained camera and send to collector. The GSM and GPS module makes this bot as automated machine to avoid human intervention.

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