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Intelligent Crowd Management Systems in Trains

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Abstract : The advent of mass transit systems like rail, metro, maglev, and various other rail based transport has pacified the requirement of public transport for the masses to a great extent. However, the abatement of the demand does not necessarily mean it is managed efficiently, eloquently or in an encapsulating manner. The primary problem identified that the one this paper seeks to solve is the dipsomaniac like manner in which the compartments are occupied. This problem is solved by using a comparison of an empty train and an occupied one. The pixel data of an occupied train is compared to the pixel data of an empty train. This is done using canny edge detection technique. After the comparison it intimates the passengers at the consecutive stops which compartments are not occupied or have low occupancy. Thus, redirecting them and preventing overcrowding.

Keywords : canny edge detection, comparison, encapsulation, redirection
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