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Intelligent Traffic Control with Convolution Neural Networks

Sudip Das[1], Ahana Chatterjee[2], Priyanka Das[3], Mousumi Baidya[4], Rupsha Das[5]
Assistant Professor, Narula Institute of Technology, Kolkata, India[1]
Students, BCA Department, Narula Institute of Technology, Kolkata, India[2,3,4,5]

Abstract: *In cities across the globe growing populations and more cars on the roads have led to worst traffic jams. This causes delays, stress higher fuel use, and more air pollution, with big cities feeling the worst effects. There's an urgent need to check road traffic density in real-time to control signals and manage traffic better. Our Smart Traffic Management System uses Convolutional Neural Networks (CNNs) and CCTV cameras to tackle this issue. This new approach allows for exact traffic density calculations, which helps adjust traffic signals based on how many vehicles are present. As a result, it eases congestion, speeds up travel, and cuts down on pollution. By using CCTV Cameras adding Convolutional Neural Networks, and tapping into the strengths of Computer Vision, our solution has a big impact on city travel. [4].*

Keywords: CNN, Deep Learning, Smart Traffic Management, Image Processing Method

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