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Density based Intelligent Traffic Light Control using Image Processing

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Abstract: Increasing traffic congestion is a constant source of frustration, time loss, and expense to users and managers of transportation systems. Traffic is the serious issue which each nation faces due to the expansion in number of vehicles. One of the strategies to beat the traffic issue is to build up a smart traffic control framework which depends on computing the traffic density and about utilizing constant video and picture preparing procedures. The topic is to control the traffic by deciding the traffic density on each roadside and control the traffic signal smartly by utilizing the density data. In this paper, an automated system based on processing of real time videos is proposed for detection of vehicles and recording count of them. The System will consist of various stages which includes Object Car Detection and Signal variation based on density. Captured video will be converted into frames and which will be pre-processed. The density count algorithm works by contrasting the ongoing edge of live video by the reference picture and via looking through vehicles Just in the district of intrigue (for example street region).

Keywords: Traffic Congestion

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