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Automated Detection of Specific Zones Using CNN: A Deep Learning Approach

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Abstract: In our day today life, time is very important thing so everyone trying to complete the task in less time is the human tendency. Therefore to complete the desired task as early as possible we should increase the speed, for example speed of vehicle. If we see the scenarios of vehicle density, it is continuously going on increasing form. As well as the drivers are not following the rules and regulation given by traffic control department at specific areas. But most of the drivers drive the vehicle very fast in that restricted areas with and without reasons. It is happened because of vehicle speed control is on drivers hand and over speed driving are there. The over speed of vehicle is the major problem due to number of accidents are increased much more. To overcome these problems we proposed automatic speed of vehicle using video processing with small modification in existing system. It reduces the speed of vehicle gradually when the restricted areas are detected. For that video recording is done through small camera of road scene and detection and identification of Road Traffic sign/ speed limit/ school zone/hospital zone is done using CNN algorithm and alert through mail. In future, Arduino and vehicle speed is reduced and alert the driver with a help of DC motor and LCD display.

Keywords: speed of vehicle

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