Abstract

The motive of this paper is to design and implement “Intelligent Traffic with Emergency Control and Stolen Vehicle Tracking System” using Artificial Intelligence. Thus this system is capable to sense the density of vehicles for intelligent traffic management and also able to recognize emergency vehicles as ambulance to allow that signal for emergency control, as well as this system also recognizes the vehicles number for tracking stolen vehicles. It is significant to identify the density of traffic on real time mainly in metropolitan cities for signals control and active traffic management using traffic mass estimation using neural networks. In Density Control System we allow that signal first which has the highest density of vehicles, through which the congestion of traffics can be controlled then signals will get back to its original position or flow. In Emergency Control System we recognize the ambulance using pattern recognition among other vehicles from traffic and if system recognized emergency vehicle then that particular signal will be allowed and other signals will become red and an emergency alarm will be generated to indicate the activation of emergency signal. And in Stolen Vehicle Tracking System, our system will recognize vehicles numbers from those vehicles which are waiting for
green signal then it will verify the validation and authentication of that vehicles numbers and report the location of signal to the control room if any fraudulent information is found. This entire system is based on artificial intelligence that can make better control system.

**References**

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**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**
Pattern Recognition, Neural Network, Density Control System, Stolen Vehicle Tracking System, Emergency Control System, MATLAB etc.