LITERATURE SURVEY

TECHNOLOGY: Internet of Things (IOT).

PROJECT: Signs with smart connectivity for better road safety.

[1] Harshitha D, Ifra Anjum, Harshitha S P, Indushree V P, **"IOT Based Smart Traffic Signal Monitoring System"**, International Journal of Engineering Research & Technology, 2019.

Proposed Work: This paper mainly focusses on controlling traffic signals in urban and sub urban areas based on the traffic density. The concept of Internet of Things is utilized to collect, process the traffic data and control various traffic signals. IR sensors are used to measure the traffic density and this data is given to Ardino Uno microcontroller board. Based on sensor data, the traffic density is computed and updated to cloud by using wifi module. The problem of emergency travel is also addressed here. RFID tags are provided to emergency vehicles and the RFID readers will read the RFID tags and update information about the emergency vehicles so that traffic can be cleared. The location of non working traffic signals are also updated by using GPS module.

[2] G Vasantha, B Pavithra, A Poornima, G Sriharisudheer, G Sreenivasulu, R Rajagopal, **"IOT Based Smart Roads Intelligent Highways With Warning Message and Diversions According to Climate Conditions"**, International Journal of Engineering and Technology, 2018.

Proposed Work: This paper mainly focuses on utilizing sensors and actuators along with Internet of Things for highway monitoring and updation. Here, LDR sensors, IR sensors, MQ-6 module, LPC 2148 microcontroller and wifi module are used for the entire operation. The 3 sensors utilized here monitors the intensity of light in the area, accident detection and gas leakage detection respectively. Based on the sensor data, the streets lights can be turned off and the information about accident can be updated to the cloud through wifi module. The proposed systems provides cost efficient means of highway monitoring.

[3] Ashok P V, SivaSankari S, Vignesh Mani, Suresh Sankaranarayanan, **"IOT Based Traffic Signalling System"**, International Journal of Applied Engineering Research, Volume 9, No. 19, 2017.

Proposed Work: This paper mainly focuses on controlling the traffic signals in urban and sub urban areas. This paper utilizes the concept of Internet of Things to monitor and update information about traffic. Here, ultrasonic sensors are used to monitor the traffic density. From the sensor data,

the vehicle count is calculated and given to Ardino Uno microcontroller board which process the sensor data. The traffic density analysis is done by Raspberry Pi3 module and the analysis results are updated to the cloud by means of wifi module. Based on the analysis results, the traffic lights are controlled by the system. The proposed system provides detailed traffic density analysis and traffic light control.