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LITERATURE SURVEY

TITLE : Signs with smart connectivity for better Road Safety

DOMAIN NAME : Internet of Things

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ABSTRACT:

In present Systems the road signs and the speed limits are Static. But the road signs can be changed in some cases. We can consider some cases when there are some road diversions due to heavy traffic or due to accidents then we can change the road signs accordingly if they are digitalized. This project proposes a system which has digital sign boards on which the signs can be changed dynamically. If there is rainfall then the roads will be slippery and the speed limit would be decreased. There is a web app through which you can enter the data of the road diversions, accident prone areas and the information sign boards can be entered through web app. This data is retrieved and

displayed on the sign boards accordingly. The IoT integrates a series of existing state-of-the-art solutions and technologies, such as wireless sensor networks, cognitive radio ad hoc networks, cloud computing, big data, and end-user applications. This study presents a survey of IoT solutions and demonstrates how IoT can be used for improvement of road safety.

INTRODUCTION:

In Global Status Report on Road Safety – 2015, the World Health Organization (WHO) noted that the worldwide total number of road traffic deaths has plateaued at 1.25 million per year, with tens of million either injured or disabled. Different initiatives, such as the United Nations' initiative for the 2011-2020 Decade of Action for Road Safety, have led to improvements in road safety policies and enforcements. However, the WHO notes that the progress has been slow and has maintained the call for urgent action to reduce these figures.

Added to the losses in human lives and wellbeing, considerable monetary losses are incurred in medical expenses, infrastructure repair, and production downtime. While the worldwide figures have plateaued, the Global Status Report does indicate higher road fatalities and injuries in low-income countries. Such disparity, signals a barring-limitation in low-income countries to improve road-safety by adopting solutions implemented in high-income countries. IoT has played a critical role in the direction due to its ability to make things more coherent, connected, and effective. IoT has proved its potential in vehicle maintenance, navigation, monitoring leading to improved transportation.

LITERATURE SURVEY:

Recognition of mishap utilizing piezoelectric sensor. The result was Emergency administrations with legitimate mishap data and help are given on schedule. Keeping away from mishaps in clasp bends and hazy regions utilizing Critical hint framework. The Outcomes was Information trade between vehicles with respect to speed and distance is caught by the framework and the choice dependent on calculation is given to the vehicle by visual presentation. Mishap prevention using Sensor framework the result was LED is set off in this manner focusing on the vehicles development. Mishap aversion in sloping track utilizing Real time system. The result was System to distinguish exhaustion indications in drivers and control the speed of vehicle to keep away from mishaps.

Help with slope side for street safety using piezoelectric sensors. The result was Altering the driver about the vehicle coming from inverse side. In the event that vehicle comes from one finish of the bend sensor faculties and LED light shines at the contrary side. By taking a gander at the LED light on/off standards driver can wake up and can hinder the speed of the vehicle. Mishap anticipation utilizing Sensors, The result was driver will be alarmed about vehicles coming from inverse side. Mishap counteraction in mountain roads utilizing Ultrasonic sensors. The result was number of mishap occurring in the bends of slopes have diminished as well as there is signal giving data that vehicles are coming from the contrary sides, thus adjusting.

Mishap avoidance framework in bending utilizing Ultrasonic sensors. The result was Decrease the quantity of mishaps in bend streets by modifying the driver through LED light which sparkles when

vehicle comes from the opposite side. Mishap avoidance system using Vibration Sensor, LED, Ignition key, DC Motor, The result was Vehicle robbery anticipation utilizing the message, voice alarm, area and photograph choice. In existing structure drivers can't judge which and when vehicles appear at twists. In this way, we have encouraged a model using which drivers can organize the curve and judge the presence of the vehicles from the far edge even more positively. Similarly as speed trap structure will help the authority with taking actions against the vehicle owner who upsets the rules.

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