ABSTRACT

SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

TEAM NUMBER:5

TEAM MEMBER

S.No	Name	Register No.
1	MANIGANDAN S	1904088
2	UDHYAPRAKASH T	1904118
3	VARUN KARTHIK T	1904120
4	VENKAT RAMANAN M	1904121
5	HARIHARAN S	2004206

PROBLEM STATEMENT:

This project proposes a system to monitor and control the traffic signals using sensors to regulate the flow of traffic, to avoid the congestion for smooth flow of traffic and to reduce accidents. Traffic sign board plays important role to make the traffic in shape and to control and manage the traffic on roads. Many at times the driver misses the sign boards while driving due to various reasons like insufficient light, fog, rain, traffic and also accident may cause because of improper sign or wrong signs. To overcome this static sign board are replaced with smart dynamic sign boards which can change the sign with the command form the server. If there is rainfall then the roads will be slippery and the speed limit should be decreased. The weather conditions are obtained and the sign and speed limit are in accordance

with the conditions. The data of the road diversions, accident prone areas, school zone, hospital zone, industry zone and the information sign boards are obtained and stored in cloud. This data is retrieved and dynamically displayed on the sign boards accordingly. So in this project we will replace the static signboards with smart connected sign boards. Also based on the traffic and fatal situations the diversion signs are displayed. Guide, Warning and Service signs are also displayed accordingly. Different modes of operations can be selected and performed in the smart traffic sign board.

OBJECTIVE OF THE PROJECT:

By the end of this project you will:

- Replace static sign board with dynamic sign boards.
- Preventing accidents with sign boards that can change signs with respect to environment.
- Getting weather data from Open Weather Map API Service
- Connecting IoT devices to the Watson IoT platform and exchanging the data and to display values.

SOFTWARE REQUIRED:

- Python IDLE

PROPOSED MODEL: