Ideation Phase

Literature Survey

Date	2 September 2022
Team ID	PNT2022TMID54322
Project Name	Signs with smart connectivity for better road safety
Maximum marks	4 marks

Title and Author(s)	Year	Technique(s)	Finding(s)/Pros/Cons
"Image Recognition and Safety Risk Assessment of Traffic Sign Based on Deep Convolution Neural Network" Rui Chen, Lei Hei, Yi lai	2020	Deep learning	The image identification of road traffic signs as well as the forecasting and evaluation of threats to road traffic safety are introduced using the dual path deep CNN (TDCNN), recurrent neural network (RNN), and long-short-term memory (LSTM) neural network models. The development and creation of intelligent transportation networks is also mentioned concurrently with the advent of intelligent algorithm tools.
"Development of Road Sign Recognition for ADAS Using OpenCV" Naina P Botekar, Mahalakshmi. M. N	2017	Histogram process	This study suggested a reliable and practical way for identifying traffic signs. Simple colour normalisation and shape analysis using HOG feature extraction are carried out. The linear SVM classifier is then used in the recognition phase to classify the signs using HOG descriptors.
"Road Sign Detection and Recognition System for Real-Time Embedded Applications" Siti Sarah Md Sallah, Fawnizu Azmadi Hussin, and Mohd Zuki Yusoff	2011	Image processing	An embedded application is suggested for a road sign detection and recognition technique. The Hue Saturation Intensity (HSI) colour model is used to create the algorithm. The traffic signs are then divided up into other groups using the shape. The traffic sign symbols are recognised using the properties of the shapes. These parameters are contrasted with the template repository.

“Internet-of-Things-Based Smart Transportation Systems for Safer Roads” Mohammad Derawi, Yaser Dalveren, Faouzi Alaya Cheikh.	2020	Internet of Things	This study highlights how cloud-based Vehicle-to-Infrastructure (V2I) communication technology might increase road safety (Infrastructure-to-Cloud – I2C).
“Telematics and Road Safety” Sivaramalingam Kirushanth, Boniface Kabaso	2018	Telematics	More research is required to give feedback approaches that are successful. It is a difficult challenge that needs to be further researched how to effectively identify those who are using their phones while driving.