ABSTRACT

SPEED LIMIT DETECTION FROM TRAFFIC SIGNBOARD USING ARTIFICIAL INTELLIGENCE

In this project, a new technique is implemented for the detection and recognition of road speed limit signs which is an important task in advanced driver assistant system. The speed limit signs are important in informing the driver about the allowable speed in a particular area. Most of the traffic accidents happen due to over speed. Different systems are implemented by the government authorities to prevent the accidents due to over speed. Here a new method proposed for speed limit sign detection and recognition in real time. "Speed limit detection from traffic sign board using artificial intelligence". The main aim of this project is driver assistance system. This method has a real time processing ability to remind drivers about the speed limitation of the vehicle when they drive their vehicle in different road conditions. It is implemented inside the vehicle not in the road, as during the first part image acquisition and pre-processing is done. Image acquisition can be used .Using "pi". Followed by this, traffic sign board detection such as shape and color, speed limit number detection, number identification and speed limit recognition is done.

This proposed system is a fully automated system, thus no manual assistance is needed. This system includes features like automated sign board detection & speed limit number identification. Nave Base Classifier is used and skimage learn machine learning algorithm is used. This system is proposed to implement in Raspberry pi 3+ single board computer using AI. Machine learning algorithm is implemented with python and Anaconda.