ABSTRACT

Road safety violations refer to the actions of drivers or other road users that violate traffic rules and regulations and put themselves and others at risk of accidents or injuries. The violations can lead to serious consequences, including property damage, injuries, and fatalities. To help promote road safety, many countries have implemented laws and regulations to enforce road safety standards, and have implemented enforcement mechanisms such as fines, points on licenses, or even imprisonment. Road safety violations detection based on number plate recognition involves the use of computer vision and machine learning algorithms to automatically detect and identify vehicles that are violating traffic rules such as over speeding, running a red light, or parking in a no-parking zone. The system captures images of the vehicles and uses number plate recognition technology to extract and recognize the license plate numbers. The data is then compared against a database of known traffic violators and violators are flagged for further action. This technology can help to improve road safety and reduce the number of accidents caused by traffic violations. In this project we can develop the framework for detect and recognize the number plates who are violate the road safety like accidents. Number plate recognition (NPR) is a technology used to automatically identify and recognize the license plate numbers of vehicles. It typically involves the use of image processing, computer vision, and machine learning algorithms to extract license plate information from an image or video of a vehicle. The recognized license plate numbers are then compared against a database of known license plates to determine the identity of the vehicle and its owner using Optical Character Recognition algorithm. And also recognize the face image whether he is owner of vehicles or not. If he is not means, consider unknown person and send alert to authorities.