# Eye Drowsiness Detection

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**Abstract:** *The major reason of the accidents is drowsiness caused by both sleep and alcohol. Due to driving for long time or intoxication, drivers might feel sleepy which is the biggest distraction for them while driving. This distraction might cost death of driver and other passengers in the vehicle and at the same time it also causes death of people in the other vehicles and pedestrians too. To prevent such accidents we, propose a system which alerts the driver if he/she feels drowsy. To accomplish this, we implement the solution using computer-vision based machine learning model. The driver's face is detected by face recognition algorithm continuously using a camera and the face of the driver is captured. The face of the driver is given as input to a classification algorithm which is trained with a data set of images of drowsy and non-drowsy faces. The algorithm uses landmark detection to classify the face as drowsy or not drowsy. If the driver's face is drowsy, a voice alert is generated by the system. This alert can make the driver aware that he/she is feeling drowsy and the necessary actions can then be taken by the driver.*

**Keywords:** Computer Vision, Machine Learning, Convolutional Neural Networks, Face Detection, Drowsiness

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