Driver Drowsiness with Deep Learning

PROJECT PROPOSAL 2021

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PROJECT DESCRIPTION

Drowsy Driving is a deadly combination of driving and sleepiness. Globally, drowsy driving is causing an alarming number of road accidents. Drowsiness when driving is caused by not getting enough sleep. To develop an image-based drowsiness detection system for detecting driver drowsiness, this project aims to identify drivers' drowsiness from images. In this project, a CNN model will be used to determine if a person feels drowsy or not based on his or her eyes being open or closed, or whether the person is yawning.

DATA USED

- A dataset provided by Kaggle contains four classes: yawn, not yawn, closed, and opened. There are total of 4799 images in the dataset.

TOOLS AND LIBRARIES

- Python
- JupyterNotebook
- Visual Studio
- Flask
- Keras, Tensorflow
- Pandas
- Numpy
- Seaborn
- Sklearn
- Computer Vision