

LANE DETECTION

Dataset:

13 Screenshot images of video captured from a car while driving.

Steps involved:

#Importing necessary packages:

- opencv(for image operations)
- numpy(for array operations)
- pandas(for dataframes)
- glob(for multiple file selection at a time)
- matplotlib(for graphical display)

#Edge Detection:

- Converting the current image into grayscale
- Using **canny edge detector** to extract edges from the image by altering the threshold values

#Region of Interest:

- Defining our region using **roi** function with the help of dimension of image as width and height, **defining a triangle including mainly the lanes.**
- Later this region is used to crop our grayscale image consisting of edges.

#Plotting lines:

- Now with the help of **HoughLinesP**(P stands for Probabilty) we have plot the lines over image where edges are detected.

#Result:

- Continous results of the images are displayed and saved to our current file.

