

### Task1: Finding lane

**Task Description:** Make a pipeline that finds lane lines on the road. Apply OpenCV functions to detect lanes in an image and later a video by following a pipeline.

**Test video, image and code:** GitHub Link

#### Project Expectations:

i. Rubric

Criteria	Meets Specification
In report explanation, using single image to explain the steps.	Report with input image screenshot with step wise variation(s).
Presents road images from a video as input and returns an annotated video stream as output.	Output video is an annotated version of the input video

ii. Code

You may use the following:      Google Colab  
   Jupyter Notebook

- iii. Writeup:            Methodology of your work  
                                 Acceptable similarity percentage < 16% (Turnitin)
- iv. Submission:        Via LMS (provide GitHub link also)  
                                 Deadline- Feb 20<sup>th</sup>, 2023
- v. GitHub:              Uploading of Project in GitHub including video

#### Steps to find lane lines:

- i. Colour selection
- a. Gray scale
  - b. Noise
  - c. Filtering
  - d. Smoothing
- ii. Region masking
- iii. Canny edge detection
- iv. Hough transform

#### References:

1. Udacity free course [Intro to Computer Vision](#)
2. <https://opencv.org/opencv-free-course/>
3. <https://matplotlib.org/>