

Write Up For Finding Lane Lines

March 1, 2019

1 Finding Lane Lines on the Road

1.0.1 1. Describe your pipeline. As part of the description, explain how you modified the `draw_lines()` function.

The pipeline consisted of 5 steps. First read the image then converted it to the greyscale and applied Gaussian Blur for Canny Edge Detection.

After canny edge Detection, I have applied `region_of_interest` function for masking, then applied hough lines by tweaking with the parameters of `HoughLines` which will be used to generate the line segments which are needed.

Now to join all the line segments, I have made few changes in `draw_line()` they are:

- 1) Separated the Right side(both line and slope) and left side(both line and slope).
- 2) Then averaged Right Side and Left Side (for both line and slope).
- 3) Then extrapolated to our mask boundaries for both the sides.

1.0.2 2. Identify potential shortcomings with your current pipeline

Potential shortComing can be :

- 1) When lanes are not straight, instead they are very curvy throughout the road.
- 2) When there are no lanes.

1.0.3 3. Suggest possible improvements to your pipeline

For the second video in P1.ipynb notebook lines detected by the hough lines are intersecting in between of the video. So that can be improved.