

Return to "Self-Driving Car Engineer" in the classroom

DISCUSS ON STUDENT HUB

Finding Lane Lines on the Road

REVIEW CODE REVIEW HISTORY

Meets Specifications

Dear student!

Congrats on taking the first step towards the Nano-degree. I hope you enjoyed working on the project. You have done an awesome job implementing the annotations. I have provided some comments and links which you may check out for further improvement.

I wish you all the best and crush your next project just like this one.



Required Files

The project submission includes all required files:

- · Ipython notebook with code
- A writeup report (either pdf or markdown)

Good job including the writeup, the submission includes all the necessary files.

Lane Finding Pipeline

The output video is an annotated version of the input video.

Well done providing an annotated output video!

In a rough sense, the left and right lane lines are accurately annotated throughout almost all of the video. Annotations can be segmented or solid lines

Fantastic job here. Your left and right lane lines were accurately annotated throughout all of the video, as required. You may consider my comments below to further improve the algorithm.

Possible Pipeline Improvements

Color Space:

Great job converting the RGB color space to HSV color space as that helps in creating different mask
filter for both yellow and white lines which will help to better detect the lines under different conditions.
You may go through this helpful resource that explains the variations in detection when using different
color spaces.

Canny Edge Detection:

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• Canny Edge Detection: In this portion of the pipeline, there are two main parameters you can tune: lower threshold and higher threshold. Your parameters here seem reasonable. If you want to play around with some more parameters here, check out this link. The tutorial in the link will describe a common method for choosing threshold in Canny Edge Detection.

Visually, the left and right lane lines are accurately annotated by solid lines throughout most of the video.

The annotated lines are solid for both the left as well as the right lanes and the challenge video is also completed. Good!





Reflection

Reflection describes the current pipeline, identifies its potential shortcomings and suggests possible improvements. There is no minimum length. Writing in English is preferred but you may use any language.

Excellent insights have been pointed out and you are on the right path. You are correct to point out the need to detect curved lanes.

This research paper goes into how to detect curves and will also help in detecting faded lanes. It uses an extended version of hough lines algorithm to detect tangents to the curve which can help you detect the curve.

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