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# Finding Lane Lines on the Road

## REVIEW

## CODE REVIEW

## HISTORY

### Meets Specifications

Hello Udacity Student,

This submission was a commendable one. You did an amazing job and should be very proud of yourself. After reviewing this submission, I am impressed and satisfied with the effort and understanding put in to make this project a success. All the requirements have been met successfully 100 %. Congratulations on making it through this project. 🙌 Based on the skills demonstrated in this work, I encourage you to exploit your ability to keep learning new things, you will be amazed how great a problem solver you will become. The Udacity team wishes you success in the upcoming projects . All efforts are appreciated, please keep the learning flame burning. Have a nice wonderful day! 🏆

### Required Files

The project submission includes all required files:

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

Fantastic! All required files were pushed to `github` ✓

Ipynb notebook with code  
A writeup report  
Output Video

## Lane Finding Pipeline

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

You successfully made an output video as required, keep it up!

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

Nicely done left and right lane lanes here! They were accurate throughout the video.

## Suggestions and Comments

- One possible parameter tuning is kernel size. You chose a kernel size of 15 here. How will this kernel size affect the parameter tuning? Try using kernel size of 3 in your pipeline and see the change in results.
- 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.
  - Increase threshold for Hough Transform - it will increase the number of intersections needed to detect a line and as a result, reduce the number of noise and incorrectly defined lines.
- You can as well increase min\_line\_len and max\_line\_gap for Hough Transform to make your lines longer with less number of breaks.

## Resources

You might want to visit the following links to understand more about Hough Transforms.

[How Hough Transform works](#)

[Hough Line Transform](#)

[Robust Extrapolation of Lines in Video Using Probabilistic Hough Transform](#)

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

Good job on producing the solid lines accurately!

## 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.

Great discussion you got here on potential shortcomings and possible improvements. 💪

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