**Meets Specifications**

Keen Learner,  
Congratulations on meeting all the specifications of the project.  
You are off to a very good start with the Self Driving Car Nanodegree. Keep up with the hard work and good luck with the next project.:udacious:

**Resources**

You can refer to the following for more insight on the project.

* [Finding Lane Lines on the Road](https://medium.com/@a.siddiqui/finding-lane-lines-on-the-road-dc5a2b2a31a4)
* [OpenCV 101: A Practical Guide to the Open Computer Vision Library](https://www.youtube.com/watch?v=jKtQxvzp1A0)
* [Introduction to Computer Vision With OpenCV and Python](https://dzone.com/articles/introduction-to-computer-vision-with-opencv-and-py)
* [Finding Lane Lines on the Road, Getting started with OpenCV](http://gear.github.io/2017-02-26-basic-lane-detection/).

**Required Files**

**The project submission includes all required files:**

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

Fantastic! All required files were submitted.

**Lane Finding Pipeline**

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

The output videos from running the pipeline on solidYellowLeft.mp4 and solidWhiteRight.mp4 in the P1.ipynb notebook are annotated versions of the input videos. Nice work done!

**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**

Your pipeline is good, with resulting lines centered on the target lane lines. The annotations were solid as well and the left and right lane lines were accurately annotated throughout the videos. Good job here!

**Resources**

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

* [How Hough Transform works](https://www.youtube.com/watch?v=4zHbI-fFIlI)
* [Hough Line Transform](https://docs.opencv.org/3.4.0/d9/db0/tutorial_hough_lines.html)
* [Robust Extrapolation of Lines in Video Using Probabilistic Hough Transform](https://medium.com/@esmat.anis/robust-extrapolation-of-lines-in-video-using-linear-hough-transform-edd39d642ddf)

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

You did very well as the resulting lane lines are single solid lines and are centered right on the actual lane lines throughout the videos. Fantastic output!

[A close up of a road

Description automatically generated](https://udacity-reviews-uploads.s3.us-west-2.amazonaws.com/_attachments/31949/1599170306/sdcf.png)

**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.**

The reflection on the project presented in the write-up is very explicit and well presented. It contains a good explanation of your pipeline together with how the draw\_lines() was modified.