Finding Lane Lines on the Road

Reflection

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

My pipeline consisted of 5 steps:

1.Read in and grayscale the image;

2.Define a kernel size and apply Gaussian smoothing;

3.Define our parameters for Canny and apply;

4.create a masked edges image and use the Hough transform;

5.Draw the lines on the original image.

In order to draw a single line on the left and right lanes, I modified the draw_lines() function by:

1.Calculated the slope and center of the two left and right lines;

2.based on Region of Interest, According to the change of the Y coordinate, the center and the slope of the two lane lines are used and the formula of (y-y '= M (x-x')] is used again to find X.

2. Identify potential shortcomings with your current pipeline

1.Can't work on curved lane lines;

2.The PIPEline should not work when the lane line on the road is less visible;

3.Because Region of Interest is stats, Lane identification in the middle of the road is inaccurate.

3. Suggest possible improvements to your pipeline

1.Optimize the conditions of the slope so that it can cope with the complex environment；

2.Upgrade Region of Interest to dynamic；