

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

My pipeline consisted of 5 steps. First, I converted the images to grayscale, then I defined the color and region selections. Third, I found the lane edges using `cv2.HoughLinesP()`. Then I wrote `merge_lines()` function to merge the lines into two lines: left lane edge and right lane edge. Finally, I draw the lines on the picture.

In order to draw a single line on the left and right lanes, I modified the `hough_lines()` function by drawing the left lane edge and right lane edge separately. I also wrote a `merge_lines()` function to merge the lines into two lines: left lane edge and right lane edge.

2. Identify potential shortcomings with your current pipeline

One potential shortcoming would be the parameters of the region and color selection is chosen manually. So it is not robust for some situations, like curved lanes.