Write up Finding Lane Lines

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Write up Template

You can use this file as a template for your write up if you want to submit it as a markdown file. But feel free to use some other method and submit a pdf if you prefer.

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Finding Lane Lines on the Road

The goals / steps of this project are the following: * Make a pipeline that finds lane lines on the road * Reflect on your work in a written report

(Image References)

Figure 1: The Universe

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Reflection

1. Describe your pipeline. As part of the description, explain how you modified the draw lines function.

My pipeline consisted of 6 steps. First, I converted the images to gray-scale, then I utilized the gaussian function to make the image blur. I used canny

function for edge detection. Region masking function was used, and then hough line function ws used.

In order to draw a single line on the left and right lanes, I modified the draw lines function. I first divided the image into two sides, left and right using "img.shape[1]/2". Each segments of lines have its own x and y position. I used the "np.polyfit" to return polynomial coefficients, in this case, the coefficients are "m" and "b". After I found minimun and maximum values for both left and right sections of image. Since x, m ,and b are defined, using "y= mx + b" to find "y". Since there are minimum and maximum points are on the each right and left sides of the image, I connected two points to create a line.

2. Identify potential shortcomings with your current pipeline

One potential shortcoming would be curve lane since the equation we are using is for linear.

3. Suggest possible improvements to your pipeline

A possible improvement would be to using non-linear equation. For the curve lane, it would be better using 3rd degree or higher polynomial function.