

Project 1- Lane Detection

Robot Perception

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❖ Honor Pledge: I pledge on my honor that I have not given or received any unauthorized assistance on this assignment.

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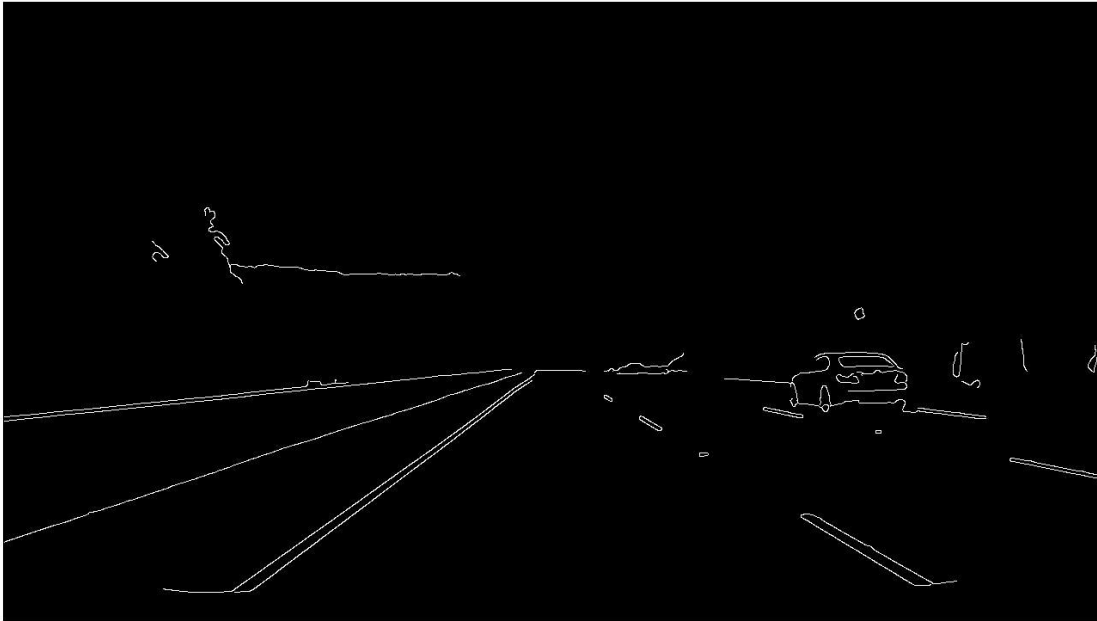
Project 1

Following Steps were Implemented:

1. Denoise the Image



2. Apply Edge Detection (Canny filter was used here)



3. Binarize the Edge Detection Output

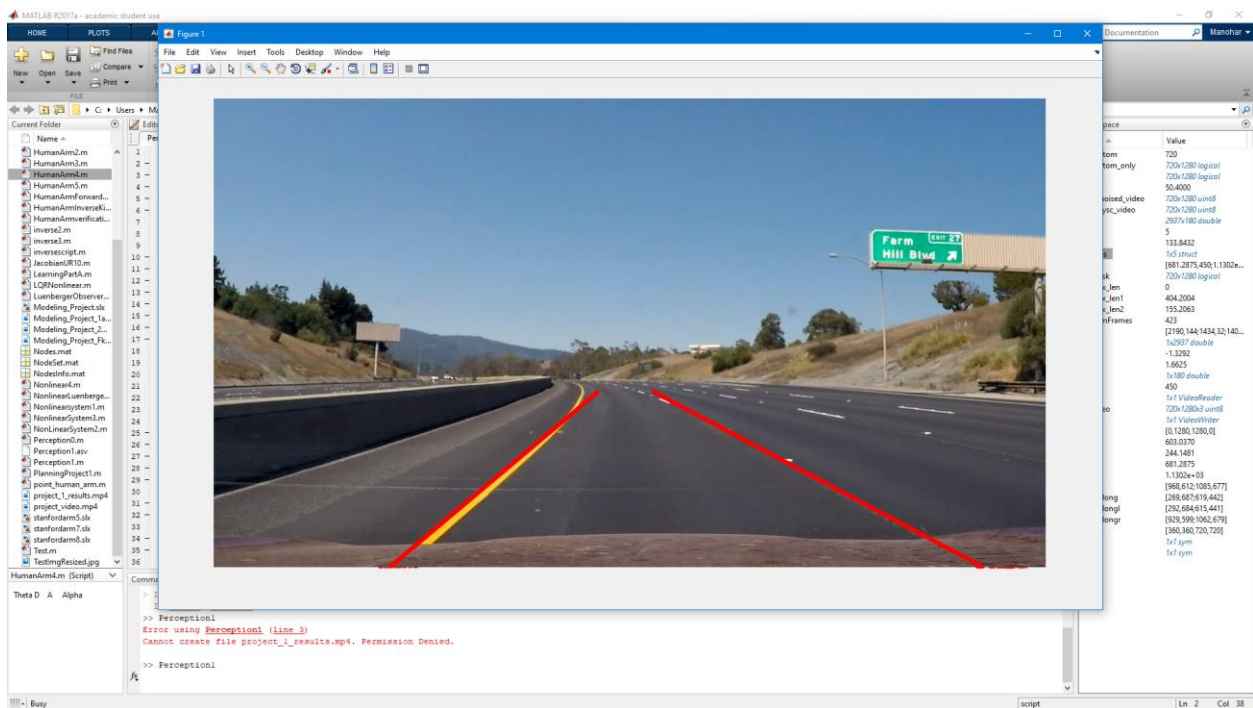
4. Extract Region of Interest (Using ROIpoly) :



5. Get Hough Lines



6. Find Peak Hough Lines and add them to original image.



Notes: The Code is Commented. Due to Time Constraints I have taken a Mobile video of the code being run, and will be attached.

Code: Everything can be run, but the mask has to be initialized as I didn't use the *poly2mask* function, but rather *roipoly*, which needs to be done by human hands.

References

- [1] Mathworks Documentation
- [2] MATLAB Website for Functions and their usages.