

Cruise Challenge #1

Steps:

1. Read each image
2. Convert it to Gray Scale
3. Find Region of Interest
4. Apply Canny Algorithm
5. Thresholding and Inversion
5. Find Hough Transform
6. Detect Lines
7. Set parameters to filter out noise and unnecessary lines
8. Display detected lane on original image
9. Print to CSV

Future Improvement:

1. Adaptive Thresholding to remove lighting and shadow effects (Tried it – but did not work well. Can be improved)
2. Learning for better elimination of false positives by analyzing previous samples
3. Predicting lane markers when input is noisy – Probabilistic approach using Kalman Filtering or Particles Filters
4. Efficiency and Speed