

Writeup for Capstone

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I did this project as an individual, so I just tested the highway route in simulator.

Firstly, I tested in the workspace but ended up with huge latency as long as I enable camera, I then used the VM to run ros nodes, and ran the simulator on my host Macbook, the VM and the simulator communicate to each other via forwarding port, it ran pretty good:

- I tested different speed limit by updating the config file, the vehicle was able to abide by the limit.
- I tested the switch between manual mode and DBW mode, the vehicle was able to slowly stop in manual mode, and it would slowly speed leading up to speed limit if toggling to DBW mode.
- I tested the camera for traffic light detection. The vehicle would stop for a red light and would resume for a green light.

I am currently working for a company on self-driving car project, and I use ros node and play ros bag daily and I tested the software on real vehicle periodically. So, I know how the difference pieces work together on vehicle.

For this project, I didn't invent anything new other than following the walkthrough video, also went through the slack channel which also helps me resolve some issues such as tuning brake value in order to completely stop the car, decreasing the look ahead waypoint amounts and reducing frequency of the image process to reduce the latency...

Thanks for Udacity, really learnt a lot.

Other than this project, I am another unfinished project: Github, I plan to take the chance to go over all the projects to consolidate the knowledge and put each project to Github.