**Friday, October 6, 2023**

I started working on getting the simulation working on the workstation computers. All but one of the workstations actually work, which I verified after testing each one in room 200C. I started installing the simulator on the one workstation that is operational. I installed conda/mamba, the package manager used as well as the numerous dependencies (especially Tensorflow/Pytorch which took a long time to install). However, you told me to not rely on anything stored on the workstations, so I might not continue using them and use something more permanent.

**Tuesday, October 10, 2023**

I tried to install the simulator on my own computer again, while finishing the installation on the workstation. It won’t work on my computer because of the large amount of disk space required (the full installation took about 10 GB on the workstation). My plan is to bring in a hard drive I have and boot off it instead so that I can save the state regardless of what computer I’m working off of. For example, when I’m at school I could have the workstation boot using my drive, and enjoy the benefits of having a faster computer. Then, when I’m at home, I’ll be able to use it with my laptop. I also started researching the camera’s Python API for integration with reinforcement learning and the overall vehicle software stack. The camera is a bit newer, which means it does have better built-in IMU support and active stereo depth, but the community around these devices is still growing. As an alternative to using dead reckoning with servo and motor output, I found this library which uses the Iterative Closest Point algorithm to track position and heading (yaw, pitch, roll) through the camera we are getting.

**Thursday, October 12, 2023**

The camera is here. I will test it out tomorrow.