Journal Report 17 2/16/20 - 2/23/20 Sarah Gu Computer Systems Research Lab Period 2, White

Daily Log

Tuesday February 18

Re-annotated around 500 new datapoints, bringing my total dataset to around 1200. Basically spent the whole class drawing bounding boxes.

Thursday February 6

Got set up on the Jupyter notebook / GPU system. Copied over the necessary files, installed a new version of darknet, and some other misc. setup things to move my directory onto the leo server. Talked with Tiffany Parise, who helped me set up the library path variables, and I will start training on the GPU next week.

Timeline

| Date | Goal | Met |
|---------------|-------------------------------------|-------------------------------------|
| Today minus 2 | Get a version of YOLO trained on a | Yes, I trained YOLO on the custom |
| weeks | custom dataset up and running | dataset |
| Today minus 1 | Obtain a higher accuracy on YOLO | No, I'm still working on debugging |
| week | | |
| Today | Train the network with more data | Yes, I annotated more points and am |
| | | starting to train on the GPU |
| Today plus 1 | Test the algorithm on the Perplexus | |
| weeks | chassis system | |
| Today plus 2 | Have the user be able to move the | |
| weeks | Perplexus based on commands | |

Reflection

This week was pretty tedious because of the brute-force type of work that I had to do to annotate training data and set up the GPU server. With that being said, Khushi is planning to bring in the chassis to school tomorrow and set it up with the Perplexus. Along with that, we plan to meet during 8th period to sync her code with my interface and hopefully get the entire thing working.