#### Week 1

*Monday -* Worked with Chase to modify the VGG image annotate to pull images from a google photos folder.

Tuesday - Swamped

Wednesday - Swamped

Friday - Attended Class.

Weekend - Plan on working on revising documents this weekend.

### **Problems:**

My only personal problem right now is jumbling my class schedule around to garnet I graduate by winter term. I am currently divided between trying to take OS2 and Cloud Development. Because of this division I have had zero time this week. Between classes and work I have had little time to work on the project this week.

### Plans:

I plan on working on document revisions this weekend and on working on an installation script for the neural network we have implemented.

#### Week 2

Monday - N/A

Tuesday - Worked on the installation script for the image processing server.

Wednesday -N/A

Friday - Working on document revision, some image processing code modified.

*Weekend -* Will be working on document revisions and code.

#### **Problems:**

Main problem is just trying to stay sane during these first few weeks. Code freeze is on Monday, not sure if this applies to our documents too, but we have one extra week. However, I would like to try and have everything completed by Monday so I don't have this deadline looming over my head.

# Plans:

We plan on meeting this weekend to revise our documents. The deployment goal will most likely be swapped out for the VGG annotator work, and the neural network goal will be scaled back to just training.

### Week 3

Monday - Begin working on a docker script to contain our image segmentation server. Helped Chase fix the default example annotator that demonstrates what we want annotated for AWS Mechanical Turk workers. Worked on document revisions.

Tuesday - Continued wrestling the docker script to install all requirements needed for our image segmentation server.

Wednesday - Finished working on the docker script at 11:40 pm.

Thursday - Tested deployment successfully on multiple machines.

Friday - Catching up on other classwork.

Weekend - Will work on the how to implement the docker container.

#### **Problems:**

Time is still an issue for me. I have found over the past two weeks I have effectively been working 7 days a week from 9 in the morning to 9 at night approximately everyday. Some times earlier, other times later. This includes work and school. This is the first time I've ever experienced physical pain form exhaustion.

### Plans:

We still plan on working on our project after our code freeze deadline this Monday. Chase and Jared are working to resolve a new issue/feature with the AWS mechanical Turk service. We have to build a server/client for the annotator to send segmented data back to us as Amazon provides no other way of sending the data files back to us.

#### Week 4

*Monday -* Chase and I worked on segmenting and labeling 500 images of hands for training.

Tuesday - Worked on machine learning

Wednesday - Worked on machine learning

Thursday - Worked on machine learning

*Friday* - Worked on a bug with the image processing server. Specific photos cause some odd issue with the image. Still working on figuring it out.

Weekend - Need to continue looking into the mentioned bug.

#### **Problems:**

Found an issue with our older network weights. For some reason the weights no longer work for our network. Went to make new ones on AWS, but found out that the server

cannot connect to the Cuda software. Not sure why this is. Hoping it resolves by tomorrow if not then I may need to call amazon or spin up a fresh server.

### Plans:

Plan on trying to resolve the issues mentioned above this weekend. But, it's going to be hard. Really need to focus on catching backup in my other classes.

#### Week 5

Monday - We needed to update our poster, so I meet with the gang to correct mistakes.

*Tuesday -* We found out that the text in the left and right panels needed to be white. We were using black. Fixed this, poster was reviewed and given the okay.

Wednesday - Machine learning (ML) midterm on Thursday, spent all day studying for that.

Thursday -After the ML midterm, I discussed the issues I was running into with the image segmentation server with Chase. Still need to resolve a few of these key issues.

Friday - Mostly working on cloud development assignment today, but hoping to look into the segmentation server issues later today if I can reach critical milestones for my cloud development project.

Weekend - If I can get my cloud development project finished this weekend, I will be able to look into bugs in the image processing server code.

#### **Problems:**

Issues with image processing server, photos of different dimensions than what was trained on leads to incorrect classification.

## Plans:

I think the above issue is due to the our mask rcnn is vectoring the image matrix.

#### Week 6

**Problems:** I was able to fix the AWS Cuda issue. However, I realized while attempting to train the network that the json files store the images as url links and not by the name of the actual image file. To fix this I have attempted to write a nodejs script that will download the images from the links, rename the images and overwrite the url with the image name. This will allow the network to find the photos. But, I'm running into an issue with overwriting the url in the json file. This is surprisingly more trivial than downloading the images. I have request assistance from Jared but I'm still waiting for a response.

*Monday -* Finally was able to fix the AWS web server.

Tuesday - Was busy studying for an AI midterm this day.

Wednesday - Identified the previously mentioned json file issue.

Thursday - Worked on script to download images from url link and edit key value pairs in the json file.

*Friday -* Still trying to fix this script. Reached out to Jase and Jared for assistance. I am hoping pared programing might help resolve the issue. Showed the issue to Chase this morning. No solution was found in the hour we could meet. Major issue is with how this json file is formatted. Some of the keys are url links which makes it fun to work with.

Weekend - Plan to continue to work on this fun JavaScript hack.

#### Plans:

I need to have that json file fixed If I am going to implement bounding boxes for the joints. Everything should be setup for it but I need that data from the json files.