Journal Report 14

1/6/20-1/9/20

Tiffany Parise

Computer Systems Research Lab

Period 4, White

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Daily Logs**

**Monday, January 6:**

Today, I tried to resolve my “can’t open file” error for train.txt by looking through the Issues folder on a darknet github to see how people with the same problem resolved the error.

**Tuesday, January 7:**

Today, you helped me resolve the “can’t open file” error. You realized that my train.txt file was from my Windows computer, so it was in DOS format and had invisible characters at the end of each line that needed to be removed. This had meant that an invisible character was included in the train.tx file path I specified, so I was looking for a file that didn’t exist.

**Thursday, January 9:**

Now I am getting an “Average IOU - nan” message for Region 106 every time. I was also getting this error for Region 94 every time, but I changed the YOLO anchors and increased the height and width variables to get this error less often for Region 94. Next, I am trying to use Yolo.mark to check my image annotations.

**Timeline:**

|  |  |  |
| --- | --- | --- |
| Week | Goal | Met? |
| Before break | Resolve remaining errors and run training program | Yes |
| 1/6 - 1/9 | Correct “can’t open file” error | Yes |
| 1/13 - 1/16 | Correct “Average IOU - nan” messages, which will likely greatly improve the program accuracy level | No |
| 1/21 - 1/23 | Correct any remaining errors to improve the accuracy level | No |

**Reflection:**

Before break, I resolved many errors with my program. I found working training terminal commands, moved all of my files to their proper locations, and adjusted variable sizes in the file that sets up my neural network. With these corrections, I was able to create the neural network to use to calculate the weights for my program. Then I ran into the “can’t open file” error for the train.txt file listing the image paths of my training images. To check that my images and training/testing lists were in accessible places, I trained a classifier system that only identified handicap parking placards, and this was successful.

This week, you helped me resolve the “can’t open file” error. Now my program is training itself to identify handicap parking placards, and I can see the prediction confidence percentages and view the prediction boxes on my images. However, my program is not very accurate yet because of “Average IOU - nan” messages during the training process. I am still working to resolve these all messages but was able to resolve some of them by adjusting my YOLO anchors. Next I plan to use Yolo.mark to check my image annotation files, as was recommended by others on github who had a similar problem.