

Daily Log

Monday November 11

I implemented the Half-DeepWriter network architecture that was suggested in the DeepWriter paper. This is one half of the more complicated DeepWriter network, which consists of two Half-DeepWriter networks with the same architecture that share output from each convolutional and dense layer. I chose to begin with Half-DeepWriter for now.

Tuesday November 12

I created a venv in zoidberg for python 3.6 and installed the packages I need to run my network. I had some issues figuring out how to get the my file onto zoidberg in order to run it there, and after a while I eventually found out I could just use pscp to get it on the TJ server and then use scp to get it on zoidberg. Although I spent way too much time trying to figure this out, I know how to do it now so it will be easy to do this with other files later in the project.

Thursday November 14

I needed to be able to access my data to run my network on zoidberg, so I decided to try to upload all my data to the server. But, remembering the size of my data folder, I decided it would be best to upload on Google Drive. Unfortunately, this will take a while, but I think it will be worth it in the long run. I also installed PyDrive.

Timeline

Date	Goal	Met
October 14-25	Run and evaluate model	Yes, using the architecture of the MNIST tutorial model, I got an accuracy of about .27 and a loss of about 2.73
October 28 - November 8	Continue research on ResNet and implement a 50 layer ResNet	Yes, but it ended up being worse than the network I had before
November 11-15	Run network on zoidberg	No, it is taking a while to upload the data to google drive, but once I do that I should be able to run the network on zoidberg
November 18-22	Run and evaluate three models on zoidberg	
November 25-29	Have network with accuracy of 0.4	
December 20	Train a model that can predict author identity with at least 0.7 accuracy on the test set	

Reflection

I started this week by implementing the network suggested in a paper about a network called DeepWriter, which we are using as a basis for our project. However, I encountered the same issue here as I did with the ResNet last week, which was that the network takes a very long time to run, which makes sense since those are both more complicated than the original 27% accuracy network I made a few weeks ago. I decided that to get the most out of my time, I needed to run all my networks on zoidberg, so I finished setting up my virtual environment. I had some trouble getting my python file on zoidberg, since I had to ssh from the TJ server into zoidberg and I couldn't figure out how to use pscp to get the file from my computer to zoidberg. After a lot of frustration, I realized I could just copy it to the TJ server and copy it from the TJ server to zoidberg, which seems obvious in retrospect, but I still spent a lot of time before I realized this. Once I had done this, I tried running the network, but got an error while loading the data because I forgot to upload the data as well. I decided that it would be best to upload my data to google drive so I can access it from anywhere so I don't have to deal with transferring the data every time I run the network somewhere else. I also installed pydrive in order to access the google drive files.