Journal Report 7
10/14/19-10/25/19
Sarah Luthra
Computer Systems Research Lab
Period 2, White

Daily Log

Tuesday October 15

I started to write some code in PyCharm, but kept getting errors about the correct interpreter not being installed. I mostly just figured out those configurations and fixed the interpreter and the Virtual Environment Path variables. I was then able to run a simple "hello world" script to make sure that PyCharm was working properly and allowing me to run code.

Thursday October 17

I started following an online tutorial on how they wrote a feed forward network. It was a little hard to follow, since they were using different packages from which they obtained their data sets, but I kept watching it because they explained the code and layer set up pretty well. I understood the flow of a network, but was still unsure if deep feed-forward was the best neural net to proceed with.

Monday October 21

I started writing my own neural net for the analytics model. I wrote the majority of the sigmoid neuron class including the constructors, and I started the "fit method" that tries to use the learning rate to construct a plot of the data and the correct fit associated with it.

Tuesday October 22

I finished the "fit" method, and also wrote the predict method which just compared the actual point to the perceptron using the sigmoid function. I also researched how to make a cmap of the data, and wrote some code to make the visual of the code.

Thursday October 24

I wrote the code for the feed forward network, which had a lot of the same methods as my sigmoid class. I am still trying to understand the significance of some of the methods, since the tutorial I previously followed included those methods.

Timeline

Date	Goal	Met
Oct 7	Determine weights for the factors.	Yes, and I even met my goal for the next week which was to determine what test I wanted to use and begin my model after I had finished my research.
Oct 14	Continue researching what neural net I want to use and begin writing it	Yes, I wrote the sigmoid neuron class after I finished setting up PyCharm.
Oct 21	Write the predict and fit methods and begin to write the network class.	Yes, and I finished the network class also.
Oct 28	Continue to write the model and figure out how to incorporate my factor weights into it.	
Nov 4	Continue working on the model; make the feed forward generic class and also the multi class classification.	

Reflection

I made a lot of progress on my model and I think I understand what I've done so far. There is still a lot more I need to figure out, and I have questions, but so far I've been able to answer them through the online tutorials I've found. Our neural nets unit in AI is helping me understand the significance of some of the methods, too. Once I finish this part of the project, which I don't think will take too much longer, I'll be able to start on the simulation.