

Daily Log

Monday October 7

Began creating plan for Neural Network Structure. Will be constructed using tensorflow with keras. Neural Network will be a simple feed-forward network due to the nature of my project. There will originally be 2 inputs to the network, location and type of natural disaster, and one output, number of people displaced (predicted). Eventual will be some level of granularity in terms of scale of natural disaster.

Tuesday October 8

Researched implementation of neural network in keras. Looks like I will need to use numpy for easy control of weights and biases. Started structuring my code using pseudocode in comments within my script. Layed out plan for creation and updating weights and biases.

Thursday October 10

Slowly began implementing tensorflow. However, ran into tons of problems with the installation and importation of tensorflow/keras in python. Took almost the entire class to get working, but finally made it so I could run a test script with no errors regarding tensorflow installation.

Timeline

Date	Goal	Met
September 22-28	Finish UI, (data query and include space for eventual neural network result)	Yes, Data query works, space for NN added, need to finish conversion table implementation into UI.
September 29-October 5	Begin work on NN, have random output as result of running network	Yes, although not as much as I hoped due to fixing some bugs
October 6-12	Finish structuring NN, begin implementation in tensorflow	Yes, although didn't start implementing tensorflow into my actual project because of many installation errors
October 13-19	Finish NN implementation in tensorflow w/ keras, begin configuring training / testing dataset	
October 20-26	Begin training of Neural Network, just make sure it is starting to train correctly	

Reflection

I accomplished a lot this week in terms of taking the first major step towards the bulk of my project, the Neural Network creation and implementation. Tensorflow and keras will remove a lot of the hardship in terms of having to hard code weights and biases updating and propagation algorithms. However, I did run into problems with my installation, specifically regarding my PATH. However, a clean installation of python 3 proved to solve the problem. I was able to successfully install tensorflow to my machine and will begin testing it out next week, and hopefully implement it into my project.