Journal Report 14 1/19/20-1/25/20 Ben Schuman Computer Systems Research Lab Period 4, White

# **Daily Log**

### Tuesday, January 20

Started testing with flipped implementation. Scikit learn took an extremely long time with poor results, however. I encountered this previously with the first implementation of my network, and it was an error with the way I specified the training algorithm, such as sigmoid, for the network to use. Will continue looking at it next class.

#### Thursday, January 21

Fixed error with training kernel specification, training has more accurate results. Like last time, sigmoid and radial basis function had better results. Next week, I want to compare the accuracy and practicality of this implementation compared to my implementation of my network for my winter goal.

## **Timeline**

Date	Goal	Met
January 13-19	Continue working on "flipped NN",	Yes, prelim results look promising,
	obtain preliminary results	just need to see if the sub project is
		practical.
January 20-26	Finish "flipped NN" and decide if it	Yes, need to do further testing to see
	is a plausible path for continuation	if it is plausible. Didn't get enough
	of project, if not, pursue geographical	results due to the two block week.
	denominations for NN inputs	
January 27-	Find if a geographical dataset exists	
February 1	that would be plausible for usage as	
	model inputs.	
February 2-8	Decide whether to continue pursuing	
	original network idea, a "flipped" im-	
	plementation, or one with more geo-	
	graphical denominations.	
February 9-15	Based on previous weeks results, ei-	
	ther continue original network idea	
	and start making it more robust or	
	pursue "flipped implementation"	

## Reflection

Most of this week involved just ironing out some errors I had encountered with the previous iteration of my network and training the network to see if it is practical for the remainder of the year. I also started looking for some more specific geographical data of natural disasters, however most of what I have found so far doesn't tend to include the raw amount of people displaced as a result of the disaster. I will keep looking for this next week as I decide which avenue I want to take with the remainder of my project.