Journal Report 19 2/23/20-2/29/20 Ben Schuman Computer Systems Research Lab Period 4, White

Daily Log

Monday, February 24

Tested coordinate based input model, accuracy relatively the same due to the data set still grouping coordinates geographically.

Tuesday, February 25

Looked at other options to increase the accuracy of my model due to the preliminary results from coordinate based input. These options include time of year, more specific event location (would be difficult to do, however, due to the way the database is set up).

Thursday, February 27

Added third input to my model, time of year (month). Looked at possibly getting rid of entries in the data set that did not include high (will have to determine what this means) displacement disasters.

Timeline

Date	Goal	Met
February 9-15	Based on previous weeks results, either continue original network idea and start making it more robust or pursue "flipped implementation"	Yes, working on map UI implementation and coordinate compatibility
February 16-22	Finish data filtration and implement coordinate-based input for model.	Yes, finished data filtration, still need to finish implementing coordinate based input.
February 23-29	Finish coordinate-based input for model.	No, but transitioned from coordinate based input to adding in a 3rd input option, time of year (Jan, Feb, Mar, etc.)
March 1-7	Begin three input model training	
March 8-15	Assess results of three input model and determine what adjustments to the model (for example, adding in time of month instead of just month) need to be made.	
EoY Goal	A - Model performs with high accuracy (at least 75 percent, where a correct output is within 1000 people (for high displacement disasters) with UI for user to easily select inputs and receive output from model quickly.	
	B - Model has UI that allows user to easily select inputs, but model does not perform with high accuracy. C - No UI and model does not	
	perform accurately.	

Reflection

Due to not being able to find a robust data set for coordinate based input, I decided to go the route of adding in a 3rd input to my model, time of year. Time of year is selected as the month in which the natural disaster occurred. Based on preliminary testing, this raised the accuracy of my model significantly. Depending on the results from my tests this coming week, I might filter through the data set and see if only including high displacement natural disasters benefits the accuracy of my model, and if so, how much.