Journal Report 15 1/26/20-2/8/20 Ben Schuman Computer Systems Research Lab Period 4, White

Daily Log

Wednesday, January 29

Inverted model and normal model resulted in similar results. I believe that the inverted model, however, is less practical for outside use. For the remainder of my time working on my project, I want to continue to use IDMC's database, but filter through the data more and have more granularity in region selection (via coordinates, clicking the region on a map, etc.).

Thursday, January 30

Started working on data filtering for more specific geographic regions. Used the "name" column where applicable to see more information on disaster location. (ex. Southern California drought)

Monday, February 3

Finished up compiling my research in preparation for my talk. Began UI component of higher granularity region selection (a map the user can click on).

Tuesday, February 4

Listened to project presentations.

Thursday, February 6

Listened to project presentations.

Timeline

Date	Goal	Met
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	Yes, wasn't able to find a more spe-
February 1	that would be plausible for usage as	cific geographical region database,
	model inputs.	will continue looking as I move for-
		ward with my project.
February 2-8	Decide whether to continue pursuing	Yes, decided against use of inverted
	original network idea, a "flipped" im-	model.
	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"	
February 16-22	Finish data filtration and implement	
	coordinate-based input for model.	

Reflection

These past two weeks I focused on the path I wanted to continue for my project for the remainder of the year. After I compared the results for the "inverted model" and saw that the error was relatively the same while the practicality of the model for applications outside of this project were much lower, I decided to go through the data within IDMC's GIDD (their database on natural disasters and human displacements) looking for ways I can filter through geographic data to have a higher granularity. I decided that because an abundant amount of the database entries have a more specific "name" column, I could come up with an automated way to specify more specific regions. I want to also create a UI component for input that allows the user to click a location on a map of the world and then select disaster type and receive the result of running the SVM model similar to how they have before the current iteration of my project.