Journal Report 1 8/30/19-9/6/19 Sarah Luthra Computer Systems Research Lab Period 2, White

# **Daily Log**

## **Tuesday September 3**

Downloaded data sets from the UN website for refugee numbers from both El Salvador and Guatemala. I also downloaded numpy and processed the data to properly format the data so it would be readable in the calculations I would have to perform on the numbers later.

### **Thursday September 5**

Read and annotated research paper about factors affecting asylum seekers and how these factors alter over time called "Destination anywhere? Factors affecting asylum seekerschoice of destination country." I researched and created two lists one for El Salvador and one for Guatemala - of factors that would affect immigration based on some other outside research and what I read in this article. I also realized that the numpy work I had done on Tuesday had not properly formatted half of the data set for some reason, so I worked to understand why this was the case. I tried to figure out what was wrong but only with marginal success. I plan on trying pandas to see if that works better for next week.

#### Timeline

Date	Goal	Met
Aug 26	Learn how Sys Lab works, find good	Yes, but I didn't download any data
	data sets	sets or do any calculations with them
Sept 2	Download and process data sets, start	Yes, I made lists for 2 countries. I
	researching and creating lists of fac-	have not finished the regression
	tors for emigration to put through a	
	multi linear regression. Downloaded	
	R packages to write the multi linear	
	regression	
Sept 9	Finalize factor list and finish a script	
	in R to run a multi-linear regression	
	on these factors to determine their p	
	values	
Sept 16	Make a document of the most im-	
	portant factors and assign to them	
	weightings based on their p values.	
	Run this by Mr. White to see if this	
	makes sense. Start researching the	
	best way to make my predictive an-	
	alytics model	
Sept 23	Continue to work on/write the	
	model	

# Reflection

This week was largely a set-up and research week. After reading through research papers and looking at several websites, I've really gotten a sense of what motivates people to leave their countries and to what extent. This background knowledge will help me verify if the p values I obtain from my multi linear regression make sense or not. Some important aspects of my research include:

- 1. Where asylum seekers are able to exercise choice in determining their destination country, factors such as the presence of social networks, historical ties between the countries of origin and destination, and the knowledge or belief that a certain country is democratic, where human rights and the rule of law are likely to be respected, are highly influential.
- 2. Policies and processes relating to the asylum procedure in destination countries are generally not well known and therefore not highly significant in influencing choice of destination. This represents a major challenge for governments which are attempting to curb flows of asylum seekers through changes to asylum policy.
- 3. Their ability to make decisions about their journey and their destination is constrained by factors such as geography, finances, available travel routes (for example flights, accessible land borders), visa options, and the networks and routes used. Of course, there is always an element of chance in refugee movement.

For the next couple weeks, I hope to finish and verify my regression, as well as start my predictive analytics model which will use the data I have cleaned up this week.