H1B Trends in Financial Sector – Progress Report 1

EPPS 6323 – Knowledge Mining

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Research Statement

- This project will look at how changes in US immigration policy regarding H1B visas from 2016 to 2024 impacted job growth, salaries and visa approvals for migrant workers in the financial sector.
 - > Compare and contrast policies under Trump vs. Biden administrations
 - ➤ Look at yearly trends in H1B job postings, salaries and approvals
 - > Use USCIS and DOL datasets to look at H1B approval numbers
 - > Perform web-scraping on the job posting sites
 - > Do EDA after for analysis of results

Methods & Data Collection

- ➤ Web-scraping official government reports and publicly accessible job posting sites to get data on H1B approval numbers, job salaries, job types, etc.
- ➤ Text mining/NLP to extract relevant keywords from job descriptions and the jobs' frequencies over the time period
- Later on, may do simple time series analysis detect any trend over the period

- Can't really use Handshake, LinkedIn and others for webscraping as it may go against their privacy policies
- ➤ Use mostly R to write the codes and quarto to make the report in order to publish to my website

Websites That Will Be Used

For data on H1B jobs:

- https://www.uscis.gov/working-in-the-united-states/h-1b-specialty-occupations
- https://www.uscis.gov/tools/reports-and-studies/h-1b-employer-data-hub
- https://h1bgrader.com/
- https://www.dol.gov/agencies/eta/foreign-labor/performance
- https://www.myvisajobs.com/reports/h1b/

For background information:

- https://www.migrationpolicy.org/article/h-1b-temporary-skilled-worker-program
- https://www.americanimmigrationcouncil.org/research/h1b-visa-program-fact-sheet