Date: Oct 14, 2021

CSCI E-7 Graduate Project Proposal

There has been an immigration trend in Hong Kong in the past few months and more applications are being processed at present and to be submitted in the near future. Besides the United Kingdom, Canada is one of the most popular destinations for us. Therefore, it will be instrumental to gain insights on Canada's job market, such as job requirements and salaries of different occupations, for our future career planning before arrival.

In order to gain insights into the job market, we should obtain some relevant datasets for analysis. Some of the most popular job boards in Canada are Indeed Canada, Monster.ca, SimplyHired and Job Bank. Since datasets are not intuitively available on these sites, web scrapping is an alternative to achieve this task. Unlike job sites offered by the public sector, Job Bank is Canada's national employment service providing sources of jobs and labor market information in the country and there has not been an extensive number of datasets pulled from Job Bank. On top of this, www.jobbank.gc.ca/robots.txt could not be found and thus there are no rules restricting web crawlers for scrapping this site's data. In other words, more comprehensive datasets can be obtained from this site.

Objective: To gain some insights into Canada's job markets

Potential Data Source:

• Job Bank: https://www.jobbank.gc.ca/home

Relevant Python Libraries:

- Beautiful Soup Documentation: https://www.crummy.com/software/BeautifulSoup/bs4/doc/
- Selenium Documentation: https://www.selenium.dev/documentation/
- Pandas API Reference: https://pandas.pydata.org/docs/reference/index.html