Team: CyberPynk

Zhiwen Zhu, Heng Jiang, Michelle Wang, Sami Ouyang

Abstract

- Used Pandas to retrieve and clean 70k+ rows of data, including using API to fetch U.S. employment data from the Bureau of Economic Analysis (BEA) and web-scraping the occupation capabilities data from O*NET Online.

- Developed metrics to evaluate the regional penetration and occupational replacement rates, established user interfaces for streamlined data querying

- Employed advanced visualization techniques, including interactive maps with Pyecharts and dynamic sorting charts with Animation, give users more intuitive illustration of robot penetration with the proliferation of robot use. Over 900+ combinations of charts are available based on user inputs.