

Education

University at Buffalo, SUNY

2020 – 2023

Bachelor of Arts, Summa Cum Laude, in Computing and Applied Math (GPA: 3.80)

Employment History

Research Assistant; University at Buffalo, SUNY

2022 - 2024

- Scraped the tweets from the Foreign Affairs Office of Kenya's Twitter, classified them by hand into three categories (away, receive, unrelated), and extracted the country of destination or guest country to create a dataset.
- Performed exploratory data analysis on the resulting data using **Pandas** and **Plotly**, revealing insights into which countries were most relevant to Kenya.
- Augmented the dataset with independent variables (such as a country's distance from Kenya, GDP, and GDP per capita) from other public datasets.
- Used this augmented dataset to perform analysis and create a regression model using **Stata** and **Scikit-Learn** to determine the factors involved in foreign leader travel.

Mathematics Teaching Assistant; University at Buffalo, SUNY

2022 - 2023

- Held 2 weekly classes for approximately 60 students per semester.
- Held office hours for students to come and individually ask questions.
- Performed grading of assignments and exams as well as entry of students' grades into a gradebook.

Counter Staff, Finisher, Closer; Paula's Donuts

2019 -

- Served customers in a fast-paced environment by quickly and efficiently taking their orders.
- Helped to supervise and direct other employees to ensure work was being completed.

Projects

Stroke Prediction (2023)

Python/SQL

- Extracted data from a stroke dataset using **Python** and created tables in a normalized database with the data.
- Queried the database using **SQLite** to analyze the data and join the tables together for further data analysis using **Pandas** and **Plotly**.
- Implemented logistic regression and k-NN Classifier models using **Scikit-Learn** to predict whether a stroke occurred.

Naïve Bayes Classifier, Basic Implementation (2023)

Python

- Implemented, from scratch, a Naïve Bayes Classifier using **Numpy** and **Pandas**.
- Tested the implementation on two sets of text data, cleaned and pre-processed with **Pandas** and **RegEx**.
- Evaluated the implementation's efficiency varying input size and analyzing asymptotic runtime (**Big O**)

Exploring Educational Disparity (2023)

Python

- Analyzed educational disparity between U.S. states by using rates of unemployment and levels of education attained, from the U.S. Census.
- Used **Pandas** for analysis and created data visualizations using **Plotly**.

Polarity in Congressional Networks (2023)

Python

- Completed as part of the [UB Directed Reading Program](#).
- Explored the foundations of network theory and political science, applying them to quantify and study political polarity over time in the United States Congress using node centrality measures.
- Encoded the United States Senate as a network using **Numpy** and **NetworkX**, then performed analysis on the network using **Pandas**.