https://jakebyford.github.io/portfolio/

Analytical problem solver who seeks to interpret data to make decisions and answer questions while communicating findings effectively.

### **EDUCATION**

• New Jersey Institute of Technology	Newark, NJ
Master of Science in Data Science; GPA: 3.75	Dec. 2023
• Kean University Bachelors of Science in Finance; GPA: 3.7	$\begin{array}{c} \text{Union, NJ} \\ \textit{May 2020} \end{array}$

# CERTIFICATIONS

• CompTIA Data+ Certification

Jan. 2024

• Rutgers University Data Science Certification

Nov. 2020

#### EXPERIENCE

# • edX, University of Pennsylvania

 $Teaching\ Assistant$ 

Philadelphia, PA/Remote

May 2021 - Present

Email: jb822@njit.edu

Mobile: +1-201-463-4698

- Classroom Enrollment: Maintained a classroom enrollment of 30 students in my section with a student retention rate improved over time by 20%
- Grading Efficiency: Prepared and Organized for classroom activities such as coding exercises increasing their confidence by 90%.
- Tutoring: Tutored students in group study sessions in the following subject areas Python, R, SQL, and Excel.
- Student Growth: Improved student code using Git and presented to management finding yielding a 5% increase from employee appraisal.

# • United States Census Bureau

Jackson, NJ

Field Enumerator/Data Entry

May 2019 - Oct. 2020

- SQL Query Optimization: Optimized data collection and analysis, resulting in a 99% collection rate, by using SQL to query and manipulate large datasets.
- Tableau Visualizations: Used SQL, Python, and Tableau to create visualization based off the complex datasets.

### Projects

- Nintendo Sales Analysis: Rolled out a comprehensive 2023 sales report using SQL, Pandas, and Python to identify trends such as Nintendo published 37% of the top 50 best-selling video games ever sold worldwide
- TD Ameritrade Investment App: Built an automated Python program with Pandas, BeautifulSoup, and Selenium that scrapes companies' financial data and stores it inside a SQL database to perform analysis against competitors
- Starbucks Coffee Recommendation: Deployed a Python Flask app with Pandas and BeautifulSoup to collect data in MongoDB and provide customer recommendations by way of the KNN algorithm, Cosine Similarity, and Collaborative/Content filtering techniques
- School Registration App: Final project for database management class with UI that incorporates Java, MySQL, and PHP allowing students to pick their classes

# Programming Skills

- Languages: Python, R, SQL, Java, Javascript, C++, C, TeX, VBA
- Technologies: AWS, React, Anaconda, D3.js, Flask, Jupyter, Linux, D3.js, Leaflet, MongoDB, MySQL, Matplotlib, MiniTab,NumPy, Plotly, RStudio, SciPy, Scikit Learn, Tableau, Tensorflow