Jake Byford

Linden, NJ 07036
(201) 463-4698
jb822@njit.edu
https://jakebyford.github.io/portfolio/

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

EXPERIENCE

edX/University of Pennsylvania
Teacher Assistant

MAY 2021 – Present
Philadelphia, PA/Remote

- **Orchestrate a typical class of 30 students in daily coding exercises**, leading to weekly survey scores consistently exceeding 90% in terms of student confidence, in contrast to the average of 80% for my peers

- **Provide tutoring to more than five students beyond regular class hours, ensuring their success in mastering problem-solving skills in SQL, Python, R, and Excel.** This effort consistently leads to weekly survey ratings surpassing 90% in instructor knowledge, compared to the 85% average among my peers

- **Improved over 100+ lines of code** in different coding exercises with bugs through **Git** and presented findings to managers which led to a promotion in hourly pay by 5% YOY ($1.30)

United States Census Bureau
Field Enumerator / Data Entry

MAY 2019 – OCT 2020
Jackson, NJ

- Accomplished efficient data collection and analysis as measured by timely completion of assignments, resulting in a 99% data collection rate, by **utilizing SQL to query and manipulate large datasets**

- Demonstrated exceptional data management skills, including proficient **data cleansing, transformation, and database maintenance**, as measured by maintaining accurate and well-organized records

- **Utilized SQL, Python, and Tableau to analyze and interpret complex datasets**, enabling efficient data exploration, visualization, and extraction of actionable insights

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

EDUCATION

New Jersey Institute of Technology   Newark, NJ
Master of Science in Data Science – Statistics (GPA: 3.67)   *MAY 2024*
Relevant Courses: *Database System Design, Big Data, Statistical Learning, Machine Learning, Probability Theory*
Extracurriculars: *Data Science Club President, Chess Club*

Rutgers University   New Brunswick, NJ
Data Science Bootcamp: Analytics & Visualization   *NOVEMBER 2020*

Kean University   Union, NJ
Bachelor of Science in Finance (GPA: 3.7)   *MAY 2020*
Extracurriculars: *Academic Honor Society, Finance Club, Chess Club*

Ocean County College   Toms River, NJ
Associate of Science in Business   *MAY 2018*

SKILLS & INTERESTS

Computer: AWS, Anaconda, C/C++, D3.js, Flask, Jupyter, Linux, Leaflet, Matplotlib, MiniTab, NumPy, Plotly, React JS, RStudio, SciPy, Scikit Learn, Tableau, Tensorflow, VBA

Interests: Baseball, football, chess, church, career development, personal finance, cooking, video games