Jack Bland

Data Science Graduate | Skilled in Statistical Data Analysis, SQL, Python, Excel & Tableau

New Jersey jack.bland2k@gmail.com **732-832-1337**

Summary

Graduate Data Science student with hands-on experience in data analysis, query optimization, data visualization, and reporting automation. Skilled in Python, SQL, Excel, R, and Tableau, with experience using MySQL, Workbench, RStudio, and AWS for data processing and reporting. Completed academic projects involving machine learning, KPI tracking, and dashboard development.

Technical Skills

Languages/Tools: Python, SQL, MySQL Workbench, R, HTML, CSS, JavaScript
Data & Reporting: Excel, Tableau, RStudio, Workiva
Software/Platforms: Workiva, AWS, Django, Bootstrap, RStudio

Education

New Jersey Institute of Technology (NJIT) – Newark, NJ
Master of Science, Data Science – Computational Track | GPA: 3.5 — Expected May 2026

CUNY College of Staten Island – Staten Island, NY
Bachelor of Science, Mathematics | GPA: 3.3 — Graduated Dec 2023

Promineo Tech Data Engineering Bootcamp
Python, SQL, AWS-based Data Engineering — Completed Aug 2024

Professional Experience

Internal Audit Intern – OceanFirst Bank, Red Bank, NJ — June 2023 – Aug 2023

- Analyzed internal audit data and control findings using Workiva, supporting SOX compliance efforts.
- Assessed financial data accuracy by reviewing samples and validating special billing arrangements against regulatory standards.
- Compiled audit results into structured reports and presented key findings during stakeholder meetings.
- Collaborated with cross-functional teams to improve documentation quality and data traceability across departments.

Engineering Intern – Port Authority of NY & NJ — Summer 2019

- Developed data-driven reports on workforce metrics and environmental risks to support operational decisions.
- Standardized project documentation and implementation plans using engineering compliance guidelines.
- Delivered data-backed responses to inquiries from engineering and planning teams, improving communication between departments.

Relevant Projects

Clustering Algorithm Comparison – NJIT
Python, NumPy, Matplotlib

- Implemented K-Means and Hierarchical Agglomerative Clustering (Single/Complete Linkage) from scratch on 3D datasets after outlier removal using Euclidean distance.
- Evaluated cluster quality using a custom Silhouette Score script; K-Means outperformed HAC across all trials with higher scores.

Apriori Algorithm vs. Brute Force – NJIT
Python, MySQL, SQL Workbench

- Built Apriori and brute force algorithms to extract association rules from transactional data based on support and confidence thresholds.

- Demonstrated Apriori's efficiency and scalability by pruning infrequent itemsets early, reducing runtime compared to brute force.

Exploratory Data Analysis & Dashboard Design – NJIT
Python, Tableau, Excel

- Conducted descriptive and inferential statistical analysis on a self-selected dataset to address stakeholder-defined business questions.
- Built interactive Tableau dashboard and visualizations to communicate trends, patterns, and strategic recommendations.
- Demonstrated ability to generate data-driven insights in a fictional business context simulating real-world client needs.

Predictive Modeling & Evaluation – NJIT
Python, Scikit-learn, Pandas, Matplotlib

- Applied supervised machine learning techniques to answer predictive questions using a public dataset; implemented models using Scikit-learn.
- Evaluated model performance using metrics such as accuracy, precision, recall, F1 score, and confusion matrix.
- Interpreted results in context of the scenario to deliver actionable insights and presented findings in a written technical report.

SQL Query Optimization & Data Management System Design – NJIT
SQL, Relational Algebra

- Designed and optimized complex SQL queries and indexing strategies for a relational database system.
- Collaborated on code reviews to identify and implement efficient query logic, culminating in a technical report and project presentation.
- Demonstrated strong foundations in data modeling, relational algebra, and performance tuning.

E-Commerce Website Development – NJIT
HTML, CSS, JavaScript, Django, Bootstrap

- Built a full-stack e-commerce web app with dynamic product listings, category filters, and cart functionality using Django and JSON data.
- Implemented secure login features and real-time cart updates, demonstrating proficiency in user interface design and backend integration.
- Focused on data-driven features to enhance usability and transactional accuracy***.***