

Junaid Tafader

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EDUCATION

CUNY – Hunter College
Bachelor of Science in Computer Science

New York, NY
Expected Fall 2025

EXPERIENCE

Software Engineering Intern (Data Systems)

October 2024 – January 2025

Nebula Academy

New York, NY

- Built and maintained end-to-end software pipelines integrating web scraping, data processing, REST APIs, and cloud deployment using Python and Flask.
- Developed RESTful services to expose processed data and visualizations, emphasizing modular design and maintainability.
- Designed and managed PostgreSQL schemas optimized for structured queries and performance.
- Implemented automated data ingestion, cleaning, and validation scripts to improve system reliability.
- Documented system architecture and collaborated with teammates to improve code quality and reuse.

AI & Machine Learning Instructor (Intensive Program)

Summer 2024, Winter 2024 – Returning 2025

Lehman College, CUNY

Bronx, NY

- Taught a 10-week intensive program covering Python programming, data preprocessing, and introductory machine learning concepts.
- Led hands-on labs focused on writing clean, efficient Python code using Pandas and NumPy.
- Guided students through applied projects emphasizing problem decomposition, debugging, and correctness.
- Explained technical concepts such as features, evaluation metrics, and bias to non-technical audiences.

Lead STEM Teacher

October 2023 – Present

STEM Action NYC

New York, NY

- Led programming lessons in web development and computational problem-solving, emphasizing structured logic and debugging skills.
- Designed project-based learning activities to help students build and deploy small software projects.

PROJECTS

Book Data Analytics & Visualization Platform | Python, Flask, PostgreSQL

- Developed a full-stack backend application scraping and processing structured book data from Goodreads.
- Designed PostgreSQL schemas and wrote optimized SQL queries for analytics and retrieval.
- Built REST APIs using Flask to expose processed data and analytical results.
- Implemented data cleaning, aggregation, and transformation pipelines using Pandas.
- Deployed the system to the cloud using Render with public API access.

Flask Library Management System (BST Optimization) | Python, Flask

- Built a web-based library management system supporting inventory management and user transactions.
- Implemented a Binary Search Tree to optimize book search, insertion, and retrieval operations.
- Applied data structures and algorithmic reasoning to improve performance and scalability.

TECHNICAL SKILLS

Languages: Python, C++, SQL, JavaScript, TypeScript, HTML, CSS

Frameworks & Libraries: Flask, Pandas, NumPy, Matplotlib

Databases: PostgreSQL, MySQL

Tools: Git, GitHub, REST APIs, Web Scraping, Cloud Deployment

Languages: Bengali (Native), English (Fluent), Arabic and Hindi (Conversational)