

Tomisin Adeyemi

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EDUCATION

New York University

New York, NY

BA in Computer Science & Data Science (Honors), Minor in Mathematics | GPA: 3.7

Sep. '21 – May '25

- **Relevant Coursework:** Data Structures, Basic Algorithms, Operating Systems, Multivariable Calculus, Linear Algebra, Probability & Statistics, Intro to Data Science, AI Research Seminar, Machine Learning, Natural Language Processing
- **Awards & Honors:** Presidential Honors Scholar (Top 10%), Davis Scholar (\$30,000 scholarship)
- **Clubs & Affiliations:** Colorstack, Rewriting the Code, NYU Data Science Club, HackNYU (Tech), Codepath (Software Engineering)

EXPERIENCE

Amazon

Seattle, WA

Software Development Engineering Intern

Jun. '23 – Present

- Working on Amazon Aurora GlobalDB, a **globally distributed relational database system** with read-only replicas across multiple AWS regions.
- Gained expertise in understanding **intricate design and architecture** of the database, adeptly adapting to the environment, and swiftly identifying ways to incorporate a **scalable, customer-centric** design into a system serving **millions** of users.
- Designing and implementing an **automated recovery** feature, enabling customers to effortlessly **restore encrypted databases** in case of unintended misconfigurations.

New York University

New York, NY

Undergraduate Teaching Assistant

Sep. '22 – May '23

- Provided weekly in-class tutoring and held office hours for two class sections, totaling **80+** students, in the course **Introduction to Computer Programming (in Python)**.
- Created **interactive tutorial materials** using Google Colab notebooks to supplement lecture material, providing additional opportunities for students to practice and reinforce their programming skills.
- Helped students build problem-solving skills by **breaking down complex programming problems** into manageable steps and encouraging them to think critically about their approach to solving the problem.

LEADERSHIP & PROFESSIONAL DEVELOPMENT

NYU Women in Science (WINS) @ NYU

Sep. '22 - Present

- Competitively selected as **1 of 6 sophomores** to participate in NYU's prestigious Women in Science program, which includes an individualized program of study, research, and mentoring.

Machine Learning Engineering Foundations @ Cornell Tech

Jan. '23 – Apr. '23

- Led **4-member** team in a Kaggle competition to build a **movie recommendation system** using **content-based filtering, collaborative filtering, matrix factorization, and hybrid** techniques.
- Collaborated to clean, preprocess, and merge **3** datasets with **~60k** data points, utilizing advanced feature engineering techniques, such as identifying duplicates and data imputation, to optimize the model's performance.
- Implemented **NLP** techniques such as **TFIDF** and **n grams** to extract valuable insights from textual data and integrate it with various **Deep Learning** models.
- Successfully secured **4th** place out of 15 teams in NYC, with a commendable Root Mean Squared Error of **17.97%**.

PROJECTS

Linguistic Features & Multi-label Emotion Classification | [GitHub Link](#)

Apr. '23 – May '23

- Led a **team of 4** in a collaborative research project on natural language processing, assessing the efficacy of **lexical, syntactic, and semantic features** for emotion classification.
- Implemented diverse **preprocessing** techniques to enhance a dataset of approximately **50k** data points, leveraging **TFIDF with unigrams** for feature extraction; additionally engineering custom textual features for model training.
- Conducted comprehensive training, evaluation, and hyperparameter tuning of **logistic regression, SVM, KNN, Random Forest, and XGBoost** models, ensuring proper separation of training, development, and test data.
- Demonstrated exceptional performance with a Micro-F1 score of **58.91%** and Multilabel Accuracy of **89.03%**, outperforming the baseline BERT model **by 8%**.

TECHNICAL SKILLS

Programming Languages & Libraries: Python (numpy, pandas, matplotlib, tensorflow, scikit-learn), C, C++ (familiar)

Developer Tools: Docker, Git, Regex, Spyder, VSCode