Tomisin Adeyemi

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EDUCATION

New York University   New York, NY

BA in Computer & Data Science (Honors), Minor in Mathematics | GPA: 3.7   Sep. '21 – May '25
- **Relevant Coursework:** *CS:* Data Structures, Basic Algorithms, Operating Systems, Theory of Computation. *Math:* Multivar. Calculus, Linear Algebra, Probability & Statistics. *Data/AI:* Intro to Data Science, AI Research Sem., Machine Learning, NLP, Data Management & Analysis, Causal Inference, Predictive Analytics (Grad)
- **Awards & Honors**: Presidential Honors Scholar (Top 10%), Davis Scholar ($35,000 scholarship)
- **Clubs & Affiliations**: Rewriting the Code, NYU Women In Science, Codepath (Software Engineering)

EXPERIENCE

Incoming Software Engineering Intern   May '23

Netflix   Los Gatos, CA

Undergraduate Teaching Assistant   Sep. '22 – Present

New York University   New York, NY
- Provide in-class tutoring for **80+** students and hold office hours open to **600+** students, for the course **Introduction to Computer Programming (in Python)**.
- Created **supplemental lecture materials** using Google Colab notebooks, providing additional opportunities for students to reinforce programming skills.
- Helped students **build problem-solving skills** by breaking down complex programming problems into manageable steps and encouraging them to think critically about problem solving approaches.

Software Engineering Intern   Jun. '23 – Aug. '23

Amazon   Seattle, WA
- Enhanced **AWS Aurora GlobalDB API** architecture to incorporate recovery of misconfigured encrypted clusters into existing workflows, benefiting **30,000+ customers** in the most popular AWS Region.
- Demonstrated exceptional problem-solving skills by innovating a cross-functional solution that **surpassed initial engineering recommendations**, effectively **resolving multi-team issues**.
- Achieved stretch goal by developing an **automated recovery feature** that utilized initial architectural improvements to seamlessly recover clusters **without customer intervention**.
- <u>Skills Used</u>: Backend Development, Systems Design, Java, Object-Oriented Programming, UNIX CLI, Spring, AWS RDS, AWS KMS, & Git

PROJECTS

<u>Linguistic Features & Multi-label Emotion Classification</u> | spaCy, NLTK, scikit-learn   Apr. '23 – May '23
- **Led 4-member team** to write the code and paper for an **NLP research project** assessing the effectiveness of linguistic features for emotion classification.
- Preprocessed **50k-row** dataset, leveraging **TFIDF with unigrams** for feature extraction; additionally engineering custom textual features for model training.
- Trained and tuned logistic regression, SVM, KNN, Random Forest, and XGBoost models.
- Achieved **89.03%** Multilabel Accuracy and **58.91%** Micro-F1 score, outperforming baseline BERT model **by 8%**.

<u>Miscellaneous Operating System Projects</u> | C, C++, Git, Docker, gdb   Jan. '23 – May '23
- Achieved grades of 90 to 100% in bi-weekly projects from my Operating Systems class, covering C programming, **Multi-Threaded Programming, File Systems, UNIX** and **Virtual Memory**.

<u>Miscellaneous Machine Learning Projects</u> | Python, Spyder, scikit-learn, PyTorch   Jan. '23 – May '23
- Achieved grades of 100% or higher (with extra credit) on projects from my Machine Learning Class covering **Regression, Classification, Clustering, Dimension Reduction** & **Deep Learning** algorithms/techniques.
- <u>Libraries used</u>: pandas, numpy, scikit-learn, PyTorch, seaborn, matplotlib

<u>Movie Recommendation System Kaggle Competition</u> | scikit-surprise   Jan. '23 – Apr. '23
- Led 4-member team to build movie recommendation system using **content-based filtering, collaborative filtering and matrix factorization** techniques.
- Collaborated to clean, preprocess, and merge 3 datasets totaling **60k rows**, utilizing duplicate identification and data imputation techniques to optimize model performance.
- Placed 4th out of 15 teams in NYC, with a Root Mean Squared Error of only **17.97%**.

TECHNICAL SKILLS

Languages: Python (pandas, NumPy, Matplotlib, scikit-learn, PyTorch), Java, C, C++ (familiar), R (familiar)
Developer Tools: Git, Docker, UNIX, Regex | **Databases**: SQL, MongoDB, PostgreSQL, pgAdmin