Chijioke Ugwuanyi

Website | GitHub | LinkedIn

SKILLS

Programming: Python, Java, Javascript

Frameworks and Toolkits: NumPy, Pandas, Scikit-learn, PyTorch, Tensorflow

Cloud and Database: AWS, PostgreSQL, MongoDB

EDUCATION

Carnegie Mellon University | August 2024 – December 2025

• M.Sc., Information Technology

University of Nigeria | September 2015 – November 2019

• B.Sc., Biological and Data Science | Grade: Second Class Honours

EXPERIENCE

AI Intern, Jego Pods, United States | Remote | Jul 2024 – Jan 2025

- Developed machine learning (ML) models to classify bad roads, while collaborating in a Scrum (Agile) environment.
- Designed predictive algorithms for energy demand forecasting in Jego EVs.
- Built computer vision algorithms for object detection and tracking for self-driving cars.

Senior Software Engineer, Interswitch, Lagos, Nigeria | On Site | Nov 2021 – Jul 2024

- Led data science and machine learning research to derive insights from diverse healthcare data.
- Improved backend system scalability and reliability by breaking down monolith architecture into various microservices, decreasing load time by over 50%.
- Ensured tight cooperation among colleagues through active listening, systematic communication, and leadership skills, leading to launch of 3 business platforms across 3 states in Nigeria within stipulated timeline.

Fullstack Developer, Minerva Technologies, Nigeria | Remote | Jan 2021 – Nov 2021

- Built sophisticated admin software for support personnel to handle 90% of tasks with ease.
- Boosted support work by over 50% by implementing an automatic transaction reversal project, for merchant transactions.
- Built a machine learning pipeline for digital identity verification and fraud detection to reduce the number of merchant verification steps and time by at least 2 hours per day.

Software Engineer, Adbasador Media Limited, Nigeria | On Site | Jun 2017 - Nov 2020

- Architected, designed, developed, and maintained 3 software solutions and re-engineered existing software quality to decrease page load times to less than 1 second.
- Created an optimized implementation plan to ensure smooth rollout resulting in 50% productivity enhancement; analyzed business processes and software requirements for implementation across 3 software solutions.
- Upgraded deployment platform to cloud-based systems, and cut out scaling and high availability problems by at least 50%.

PROJECTS

Evaluating Model Robustness to Adversarial Attacks | Project link

• Conducted adversarial robustness research on CIFAR-10 that revealed ResNet-50 models drop from 87% to 9% accuracy under FGSM attacks, but adversarial training can recover 55% robustness.

MLOPS Pipeline | Project link

• Engineered an end-to-end data engineering pipeline, including data ingestion and orchestration, data

transformation, and analysis.

Comparative Analysis of Classification Models | Project link

• Carried out a research to identify the best machine learning model for loan approval prediction based on two metrics: accuracy and area under curve.

Plaid Shell implementation from scratch | Project link

• Implemented a fully featured Linux shell from scratch using C.

Hoppscotch API Live Sync | Project Link | Blog Post

• Added API Live Sync feature to Hoppscotch to auto-sync backend code changes to API documentation.

CERTIFICATIONS & LINKS

- Amazon Web Services | Intermediate
- Andela Web Specialist
- Google Web Specialist
- Harvard CS50 Certificate
- Kaggle | Machine Learning Project

LEADERSHIP & COMMUNITY ENGAGEMENT

Vice President Education, TechyTalkers Toastmasters Club | 09/2024 - 10/2025

- Organized meetings, assigned speech roles, and ensured members progress through their educational pathways.
- Connected new members with mentors, tracked individual progress, and recognized member achievements.
- Created the meeting schedules, planned contests, and ensured high-quality learning experiences.

Member, Data Science Club, CMU-Africa | 2024-2025

• Led a team to participate in the Disability AI Hackathon where we used disability datasets to build solutions for disabled people in Africa, came out in the top 5.

Volunteer, *The Lagos Food Bank Initiative* | 01/2024 – 07/2024

• Facilitated outreaches and workshops on food distribution to indigent communities in Lagos, Nigeria.