

CYRIL KOJO DZANTOR

Mobile: +233207798820 | Email: cyrildzantor17@gmail.com |

PROFILE

Computer Science graduate specializing in Artificial Intelligence, Machine Learning, and Software Engineering. Proficient in Python, SQL, JavaScript, and modern backend technologies, with experience building AI-powered applications, automation solutions, and scalable APIs. Strong analytical, problem-solving, and communication skills, with a passion for developing innovative, data-driven solutions that create real-world impact.

EDUCATION

Kwame Nkrumah University of Science and Technology

January 2022 - September 2025

Kumasi, Ghana

BSc. Computer Science

First Class Honors

Mfantsipim School

September 2018 – October 2021

Cape Coast, Ghana

WASSCE – Senior High School Education

General Science

WORK EXPERIENCE

AI/ML Engineer, Cognize Corporation, Leeds, United Kingdom

November 2025 – Present

(Remote)

- Applied machine learning concepts, specializing in natural language processing (NLP) techniques and computer vision solutions.
- Collaborated effectively with cross-functional teams, enhancing teamwork skills.
- Built AI agents and workflow automations across different business functions, integrating LLMs, APIs, and third-party tools to streamline operations and improve efficiency.

Computer Science Intern, Volta River Authority, Accra**November 2024 – December 2024**

- Delivered a presentation on the applications of Python in Data Science.
- Presented on the benefits of predictive maintenance in improving plant operations.

IT Service Delivery, Telcel, Accra**September 2024 – November 2024**

- Assisted in the migration of company PCs to new servers as part of the IT migration team.
- Diagnosed and serviced faulty PCs to ensure optimal performance.

Data Scientist Intern, Volta River Authority, Accra**November 2023 – December 2023**

- Collaborated on an article highlighting the significance of blockchain in the energy sector, featured in the company's newsletter.
- Enhanced expertise in machine learning and Artificial Intelligence during the internship.
- Enhanced data processing pipelines, reducing data handling time.

Computer Science Intern, Volta River Authority, Accra**September 2023 - November 2023**

- Led a team in automating the VRA internship application process, resulting in significant time savings.
- Streamlined various processes, improving overall application management efficiency.
- Successfully managed a team of four interns, enhancing project completion rates and team collaboration.

PROJECTS/RESEARCH EXPERIENCE

Real-Time Bank Fraud Detection System - Human-in-the-Loop, Fast API, Docker, Web Sockets, ML

- Designed and implemented a real-time fraud detection system capable of identifying suspicious banking transactions with low latency.
- Built with a hybrid architecture combining traditional machine learning models (supervised and unsupervised) with a rules engine and a decision logic to improve detection accuracy and reduce false positives.
- Integrated a human-in-the-loop (HITL) mechanism, automatically escalating low-confidence predictions to human analysts for verification, improving system reliability and trust.
- Implemented a re-training logic which leverages the data fetched from the human analyst verifications.

Phone-Controlled Smart Light System - ESP32, MQTT, Home Assistant, InfluxDB

- Built a smart lighting system by wiring an ESP32 to a relay module, running a local web server, and integrating with Home Assistant for phone-based control.
- Extended the system with a physical button for offline control, a presence mode that toggles lights based on sunset and set times, and state-change logging to InfluxDB.

Hostel Price Prediction App (Mini Project) - Machine Learning (Regression), Django & MongoDB

- Developed a web-based application to predict hostel prices based on features such as location, amenities, room type, capacity, and historical pricing, using regression-based machine learning models.
- Implemented the backend using Django and integrated a trained model using Linear Regressor, XGBoost Regressor to generate real-time predictions for hostel pricing
- Built intuitive dashboard that suggests hostels to users based on their preferences and the results of their price predictions.
- Provides users the opportunity to directly reach the hostel managers

AI Customer Support Agents - LLMs, Workflow Automation, APIs

- Designed and deployed AI-powered customer support agents for businesses, automating query handling and reducing response times.
- Integrated agents with existing business tools and communication channels to streamline customer interactions.

University Timetable Scheduling App (Capstone Project) - Python, Django, Genetic Algorithms

- Designed and implemented an automated scheduling system using a genetic algorithm to optimize course and exam timetables, minimizing conflicts like lecturer double-booking and room overflows.
- Built a dynamic administrator dashboard to view, export, and regenerate optimized timetables, enhancing scheduling efficiency across departments.
- Developed user dashboards for students to view general timetables, create personalized schedules, and access assigned exam centers and seating arrangements.
- Enabled lecturers to view personalized teaching timetables and their corresponding exam proctoring duties.

PROFESSIONAL TRAINING/ CERTIFICATION

Certified Cloud Practitioner

November 2025 Amazon Web

Services

Data Science Certification Course

May 2023 – June 2024

ALX Africa and Explore AI

VOLUNTARY/EXTRA-CURRICULAR ACTIVITY

Data Management analyst, AIESEC KNUST

April 2024 – September 2025

- Lead the team in drawing policies to enhance member experience
- Handled the organization's database

Member, NUPS-G Web Team

January 2022 – September 2025

- Enhanced the organization's web platform, leading to an increase in user engagement and satisfaction.
- Conducted training sessions on web development for new team members, improving overall team skill level.

SKILLS AND ABILITIES

-
- Programming Languages: Python, SQL, JavaScript
 - Cloud Computing: Proficiency in platforms like AWS, Microsoft Azure
 - Data Manipulation and Analysis: Pandas (Python library), NumPy (Python library), SQL for database querying
 - Data Visualization: PowerBI
 - Machine Learning: Pandas and Numpy, Matplotlib, Seaborn, Scikit-Learn, TensorFlow, Genetic Algorithms
 - AI & Automation: Large Language Models (LLMs), Workflow Automation, Human-in-the-Loop Systems, APIs
 - Data Cleaning and Preprocessing: Handling missing data, Feature scaling, Outlier detection and treatment, Feature selection, Feature Engineering.
 - Frontend Technologies: Proficient in HTML, CSS, JavaScript, comfortable with React

- Backend Technologies: Proficient in Django and FastAPI
- DevOps & Containerization: Docker, real-time deployment pipelines with Web Sockets
- Embedded Systems & IoT: ESP32 microcontrollers, MQTT, Home Assistant, relay modules, hardware-software integration
- Databases & Data Handling: PostgreSQL, Microsoft SQL, MongoDB, InfluxDB; relational and non-relational database design
- Networking: TCP/IP, sockets, WebSockets, MQTT

Soft Skills

- Strong problem-solving and critical thinking
- Clear communicator in technical setting
- Proven teamwork

REFERENCES

Name: Hellen Catherine Ametume

Digital Innovation Unit, Volta River Authority

Email: catherineametume@gmail.com

Name: Emmanuella Yaa Akormaa

The AI Foundry

Email: ekumi@theaifoundry.ai