JOHN EVANS OKYERE

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Career Summary

AI/ML Engineer with 2+ years of experience designing, deploying, and scaling production-ready machine learning and automation solutions Proficient with Python, NLP, and RAG architecture, with proven success building AI agents, recommendation engines (85% precision, 79% recall), and prediction models (8945% accuracy) Delivered an AI Data Analyst agent in e-commerce that improved decision-making by 40% Specializes in designing and deploying end-to-end ML pipelines, delivering production-ready solutions, and creating data-driven business strategies that drive measurable impact

Education

C.K. Tedam University of Technology and Applied Sciences

Navrongo, Ghana

B.Sc Computer Science

February 2021 - August 2024

Dev4Tech (Developers Foundry)

Lagos, Nigeria

AI/ML Engineering Program

August 2025 - Present

Azubi Africa

Accra, Ghana

Data Analytics Training Program

July 2025 - September 2025

Work Experience

AI/ML Engineer Intern | Remote

Mumbai, India

AISoftDev (IT & Technology)

August 2025 - October 2025

- Developed an LLM-integrated LinkedIn posting agent with n8n, saving 3 hours daily by automating research and content generation
- Designed an AI-enabled web app for content extraction and summarizing, cutting research time by 95%
- Engineered a Prompt-to-JSON Enhancer (Render/Vercel), boosting AI response accuracy by 50% via structured prompt transformation
- Deployed an AI-driven PDF generation tool with validation checks, improving content delivery accuracy by 30%

Data Analyst | Hybrid

Accra, Ghana

Shaq Express (E-Commerce & Delivery Company)

September 2024 - September 2025

- Analyzed multi-source datasets to uncover growth drivers, increasing weekly orders from $500 \rightarrow 700$ (+40%)
- Automated product database sync with Python, enhancing Melcom data refresh efficiency by 70%
- Deployed geospatial analytics dashboards to identify underserved areas and optimize delivery zones, driving an 80% increase in order volume

- Collaborated with 5 back-end developers to build a unified analytics dashboard (sales, vendors, payments), accelerating management's decision-making process
- Orchestrated onboarding strategies with a 10-member operations team, leveraging insights to boost sales by 90% in underserved markets

Projects Experience

Production RAG Document AI Agent

- Designed full MLOps pipeline, including authentication, CI/CD, and containerized deployment
- Integrated Supabase for chat/user tracking; backend on Render, frontend on Vercel
- Enabled users to query PDFs/CSVs and summarize documents, reducing manual search time by 50%

Bank Subscription Prediction

- Processed 49K+ banking records with 17 features, performing normalization, encoding, and class balancing with ADASYN, increasing minority class representation from 12% to 45%
- Evaluated Random Forest, XGBoost, Logistic Regression, and Decision Tree models, achieving best performance with Random Forest: 89.45% accuracy, 93.05% ROC-AUC
- Improved recall by 17% using XGBoost, minimizing false negatives and enhancing outreach strategies
- Hosted the pipeline via Streamlit web app for interactive predictions

Conversational AI Chatbot (NLP)

- Built backend with FastAPI and Dialogflow for booking, FAQs, and services
- Increased user engagement by 60%

Book Recommendation System

- Processed 210K+ ratings; implemented KNN, SVD, NMF, and Hybrid models
- Raised precision from $3\% \rightarrow 15\%$ (400% increase) and recall by 6%
- Deployed live on Streamlit with full end-to-end pipeline

Skills

- Programming & ML: Python, PyTorch, Scikit-Learn, XGBoost, NLP, RAG, Regression, Classification, SVM, Neural Networks, Deep Learning, Ensemble Methods, Reinforcement Learning, Time Series Analysis
- AI & Automation: AI Agents, LangChain, n8n, Dialogflow, Chatbots, Recommendation Systems, Predictive Modeling, Model Optimization, Pipeline Automation
- **Deployment & MLOps:** FastAPI, Streamlit, Docker, CI/CD, Containerization, Cloud Deployment, Streamlit Web Apps, Model Monitoring, API Integration
- Data & Analytics: SQL, PostgreSQL, Supabase, Airflow, Data Cleaning, Feature Engineering, Data Transformation, Data Modeling, ETL Pipelines, Data Warehousing, KPI Monitoring, Reporting, Data Visualization, Tableau, Matplotlib, Seaborn
- Cloud & Web Development: AWS, Nextjs, React, Git, Version Control, CI/CD pipelines

• **Databases & Data Engineering:** MySQL, PostgreSQL, NoSQL, Query Optimization, Data Partitioning, Database Architecture, Data Governance, Data Quality

Certifications

- Data Analysis with Python FreeCodeCamp
- Google Data Analytics Coursera
- Intermediate Machine Learning Kaggle
- AWS Cloud Practitioner Essentials AWS

Leadership

- Welfare Chair SRC, CKT-UTAS : Supported 5,000+ students
- General Secretary NUPS-G Navrongo: Coordinated across 24 schools
- SRC Executive Council Member CKT-UTAS