

Kabiru Akande, PhD
Senior ML and Data Engineer | GCP MLE Certified | Terraform Associate
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SUMMARY

Cloud-native ML Engineer with over a decade of experience designing, deploying, and optimizing AI/ML systems on GCP and AWS. Expert in building scalable MLOps pipelines, cloud infrastructure, and production-grade ML services. Proven ability to bridge business needs and technical execution, enabling faster deployments, enhanced reliability, and greater customer outcomes. Passionate about mentoring, continuous learning, and driving innovation at scale.

TECHNICAL SKILLS

- **Cloud & DevOps:** CP (Vertex AI, BigQuery, GKE, Dataflow, Composer), AWS (SageMaker, Lambda, Step Functions), Terraform, Kubernetes, Docker, GitHub Actions, CircleCI, Monte Carlo, Datadog
- **ML & Data:** PyTorch, TensorFlow, Scikit-learn, XGBoost, NLP, Deep Learning, Drift Detection, Apache Beam, Airflow, LLMs, RAG, Agentic AI
- **Languages & Tools:** Python, SQL, Git, Bash, Javascript, NodeJs

EDUCATION

University of Edinburgh

Edinburgh, UK

PhD, Digital Communication and Signal Processing

2019

- **Relevant Coursework:** Deep Neural Networks, Data Analysis, Digital Systems, Python with Databases, Distributed Systems, Hybrid Intelligent Algorithms,
- **Thesis:** Enhanced Carrierless Amplitude and Phase Modulation for Optical Communication
- **Professional Certification:** Neural Networks and Deep Learning (Coursera)

King Fahd University of Petroleum & Minerals

Dammam, KSA

MS, Digital Communication and Signal Processing (CGPA: 3.71/4 - Top 1% of cohort)

2014

- **Relevant Coursework:** Detection and Estimation, Adaptive Filtering, Linear Control Systems, Stochastic Processes, Cryptography, Advanced Computer Networks, Cyber Security
- **Thesis:** Frequency Domain Blind Equalization of Communication Channels
- **Professional Certification:** Machine Learning (Coursera), Cisco Certified Internetwork Expert (CCIE Written)

Ladoke Akintola University of Technology

Ogbomoso, Nigeria

B.Tech., Electrical/Electronics Engineering (CGPA: 4.29/5 - Top 2% of 300+ students)

2009

- **Relevant Coursework:** Advanced Engineering Mathematics, Computer Programming, Digital and Control Systems, Electromagnetics, Fundamentals of Learning Algorithms
- **Thesis:** Bit Rate Performance of Mobile Fading Channels
- **Professional Certification:** CCNP, CCNA, CCNA Security

WORK EXPERIENCE

OVO Energy

Bristol, UK

Senior MLOps Engineer

Dec 2024 - Present

- Spearheaded the development of an MLOps platform on GCP, integrating CI/CD, versioning, monitoring, and automated retraining workflows—reduced model deployment times by over 50%.
- Designed and implemented a real-time model drift monitoring framework that triggered automated retraining pipelines using Vertex AI Pipelines, improving model resilience and boosting conversion rates by 15%.
- Introduced Infrastructure-as-Code (IaC) using Terraform, reducing provisioning errors and slashing infrastructure setup time by 60%.

Senior Data Engineer

Oct 2023 - Nov 2024

- Architected and maintained a cloud-native data warehouse, integrating batch, streaming, and real-time pipelines from multiple third-party vendors using Dataflow and Pub/Sub. The warehouse became foundational for enabling data-driven decisions across the business ranging from analytics, reporting, modelling and surfacing business insight
- Built a real-time data pipeline with API Gateway and Cloud Functions, which unlocked scaling barrier to go-live
- Containerized complex data processes and embedded them within CI/CD pipelines, accelerating build-test-deploy cycles and reducing operational bottlenecks.

Senior Machine Learning Engineer

Nov 2021 - Sept 2023

- Collaborated with cross-functional teams consisting of data scientists, product managers, and engineers to develop churn prediction and recommendation models that reduced customer churn by 20%.
- Built scalable model-serving architecture on Kubernetes which supports low-latency inference at scale.
- Mentored junior MLEs and data scientists, fostering team growth and reducing recruitment overhead.

BIG-DEAL

Sept 2019 - Nov 2021

Senior Machine Learning Engineer

Bristol, UK

- Developed an AWS Lex-based chatbot as data product in line with MLOps and DevOps best practices
- Led the development of time-series predictive models (**Healthy-Air**) on AWS SageMaker for improving poor indoor air quality leading to new line of product and revenue streams; Promoted to Senior ML Engineer
- Established framework for data processing and machine learning pipelines which accelerated time to production

Mindful Chef

July 2019 - Sept 2019

Data Scientist

London, UK

- Built a personalised recommender system (**Digital Waiter**) using innovative recipe embeddings (recipe2vector) which increased purchase volume by 35%, retention by 20% and yield £2 million additional yearly revenue
- Developed a decoupled microservice platform serving recommendations via api; saved 10% on integration time

Li-Fi Research and Development Center

Nov 2015 – July 2019

Machine Learning Research Engineer

Edinburgh, UK

- Developed multilayer perceptron models for channel estimation with 5% improvement on state-of-the-art
- Created a Python application to automate experimental workflows; Team's productivity boosted by 50%
- Presented collaborative research output in 8+ international conferences (8 countries and 3 continents)

Center for Petroleum Refining and Petrochemicals Dammam

Aug 2012 – Oct 2015

Machine Learning Research Engineer

Dammam, KSA

- Improved oil reservoir characterisation by developing a novel feature engineering technique with 100+ citations
- Unified and streamlined ETL workflows with analytical frameworks for rapid experimentation and prototyping
- Awarded three US patents for innovative techniques that minimised modelling errors in communication channel

VOLUNTEERING & LEADERSHIP

- ML Content Contributor – Towards Data Science, Medium
- Co-founder and mentor - Naija data and IT professionals UK
- Chair – University Graduation Empowerment Committee (2009)
- Technical Coordinator – IEEE ICC 2018 Conference, Kansas City
- Technical Tutor – CodeYourFuture UK (<https://codeyourfuture.io/>)

PUBLICATIONS & RECOGNITION

- 3 US Granted Patents
- Royal Academy of Engineering “UK Promising Talent” Award
- Most Innovative Prize – S2DS 2019 (UK Data Science Bootcamp)
- 3rd Place Winner, 20th Anniversary National Essay Competition (TMC Nigeria, 2024)
- 60+ peer-reviewed journal and conference publications covering ML and engineering disciplines