

Benjamin Imo Uka

AI & Data Engineering | ML Systems, DRL | Databricks, MLOps

- 📍 Port Harcourt, Nigeria -- ✉ benjaminukaimo@gmail.com -- ☎ +2347067193071 -- LinkedIn: <https://www.linkedin.com/in/benjamin-uka-imo> --GitHub:<https://github.com/uka-ben> -- YouTube: [@blackdatascience](https://youtube.com/@blackdatascience) - Portfolio:<https://benjaminuka.streamlit.app/>

QUALIFICATION SUMMARY

Dynamic and solutions-oriented AI & Data Engineer with robust experience in machine learning, data engineering, MLOps, and cloud-native analytics. Proficient in designing scalable pipelines, deploying production-grade ML systems, and leveraging cutting-edge AI technologies including GNNs, Transformers, RL, and LLMs. Strong background in statistical modeling, big data processing, and decision intelligence.

TECHNICAL SKILLS

- **Machine Learning & AI**
 - Time Series (TFT, Prophet), Graph Neural Networks, Deep RL, Quantum ML (Basic)
 - NLP (LLM, RAG)
 - AutoML (Autogluon, H2O.ai, Pycaret)
- **Programming & Data Tools**
 - Languages: Python, SQL, Pyspark, Spark SQL
 - Libraries: Stable-Baselines3, Numpy, Pandas, Gymnasium, scikit-learn, TensorFlow, PyTorch, Hugging Face, RLlib
 - Data Visualization: Matplotlib, Seaborn, Streamlit, Power BI, Looker
- **Data Engineering and Cloud**
 - Big Data: Databricks Lakeflow Declarative Pipelines, Jobs Orchestration, DLT, Structured Streaming, ETL Pipelines, Airflow, Delta Lake, AutoLoader, CDC, SCD2
 - Cloud Platforms: DataBricks, GCP (BigQuery, Dataflow), Azure
 - Data Warehousing: Databricks SQL, BigQuery
 - MLOps: MLflow(Databricks), CI/CD Pipelines, Flask.

PROFESSIONAL EXPERIENCE

- **AI & Data Engineer | Miracle Health Recruitment, UK- (Remote - Nov 2024 –Feb 2025)**
 - Worked with team to ensure seamless integration of data-driven solutions across operations.
 - Built streaming data pipelines using Delta Live Tables and AutoLoader
- **Junior Data Scientist | Baknance Technology (Remote - Feb 2023- April 2024)**
 - Developed ML systems using with real time Data.
 - Developed a RAG-based chatbot using Hugging Face, OpenAI, integrated with Databricks pipelines for document retrieval.
 - Designed end-to-end ETL pipelines for ingesting and transforming financial data.
 - Deployed predictive financial models for business forecasting optimization.
 - Implemented Delta Lake workflows to enable continuous model training and monitoring.

PROJECT

- **Finance**
 - Stock Market Analysis Tool: Built a financial system using void anti-symmetric pattern detection (Live Demo: <https://timeion.streamlit.app/>)
 - Portfolio Optimization System: Designed a DRL-based solution for asset allocation.
 - Created a sixfold model for profitable financial market trading, featuring ensemble method, time series, DL, QNN, DRL, etc.

AI/NLP Consultancy & Chatbot Development

- Built and deployed chatbots like benGPT and other advanced conversational LLM models leveraging Hugging Face and OpenAI, achieving real-time customer engagement across multiple platforms.
- Built a multimodal healthcare diagnostic tool using NLP to analyze patient data and give medical recommendations, improving disease prediction accuracy by 35%. (Live Demo: <https://benhealthcare.streamlit.app/>)

Anomaly Detection

- Built a state of the art Fraud Detection and Risk Modeling system using Databricks, DRL, GNN and transformer models
- Designed real time fraud detection system for E-Commerce and healthcare claims.
- Designed AI driven cyber security threat detection using Network Traffic, user behavior and threat intelligence feeds.

Predictive & Optimization Systems

- Carbon Emission Policy Optimizer: DRL for global CO2 reduction strategies (Demo: <https://ben-co2optimization.streamlit.app/>)
- ML modeling: Built a real-time machine learning and data analytics tool, for anomaly detection, clustering, regression and classification improving prediction’s accuracy by 25% and leading to a 20% improvement in decision-making efficiency. (Live Demo: <https://benjitable-ds.streamlit.app/>)

Robotics

- Robot Control Models: Trained agents in custom environments using PPO and SAC.

EDUCATION

- Bachelor in Accountancy Imo State University, Nigeria (2016)
- National Diploma in Accountancy Imo State Polytechnic, Nigeria (2012)

CERTIFICATION

- Databricks Generative AI
- Neural Networks (SIMPLI-LEARN)
- Deep Reinforcement Learning (Hugging Face) - In progress