Gabriel Oyetunji

Machine Learning Engineer | Data Scientist | Computer Vision Specialist

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Professional Summary

Machine Learning Engineer with 4+ years building production AI systems and data-driven solutions. Specialized in Computer Vision and Medical AI, with deployed deep learning models achieving 82.5% accuracy on clinical imaging and 98.1% on action recognition. Proven track record implementing research papers (Graph Neural Networks), delivering end-to-end ML pipelines, and translating complex models into production applications. Strong background in data analytics, having delivered Power BI dashboards and predictive models for healthcare and NGO sectors.

Technical Skills

Machine Learning & Deep Learning
TensorFlow • Keras • PyTorch • Scikit-learn • CNNs • Image Classification • Medical Imaging • Transfer Learning • OpenCV • Graph Neural Networks • Multi-task Learning • Explainable AI (Grad-CAM) • Feature Engineering • Hyperparameter Tuning • Model Evaluation

Data Science & Analytics
Python (Pandas, NumPy, Matplotlib, Seaborn) • SQL • R • Power BI (DAX, Power Query) • Excel • Tableau • Statistical Analysis • A/B Testing • Hypothesis Testing • Predictive Modeling • Time Series

ML Operations & Deployment
Streamlit • Streamlit Cloud • Model Serving • Git • GitHub • Jupyter Notebooks • Google Colab • Data Pipelines • ETL

MACHINE LEARNING PROJECTS

Breast Cancer Detection System | TensorFlow, Keras, Streamlit, OpenCV

Deployed Medical AI Application

- Engineered production-ready deep learning system for detecting Invasive Ductal Carcinoma (IDC) in histopathology images, achieving **82.54% accuracy** and **84.49% sensitivity** on 277,524 tissue samples from 162 patients

- Implemented patient-level stratified data splitting to prevent leakage, applied CLAHE preprocessing and data augmentation, achieving **90.52% AUC** on 59,219 test images

- Deployed interactive web application to Streamlit Cloud with Grad-CAM visualization for model explainability, enabling real-time predictions with confidence scores
- Live Demo | 📁 GitHub

ST-GCN Human Interaction Recognition | PyTorch, Graph Neural Networks

Research Implementation

- Implemented Spatial-Temporal Graph Convolutional Networks from research paper for skeleton-based action recognition, achieving **98.1% accuracy** on structured SBU dataset
- Developed and evaluated **9 model variants** including multi-stream fusion, attention mechanisms, and transformer architectures
- Conducted comprehensive cross-dataset evaluation, quantifying **53% performance drop** on unconstrained UTI dataset, providing insights into real-world generalization challenges
- Colab Demo | 📁 GitHub

Multi-Task CNN: Fruit Classification & Price Prediction | TensorFlow, Keras

Computer Vision + Regression

- Built multi-task deep learning model combining classification (36 fruit/vegetable categories) with price prediction, achieving **97.21% classification accuracy**
- Implemented embedding generation layer for image similarity and retrieval tasks
- Applied data augmentation, learning rate scheduling, and regularization techniques for improved generalization
- 📁 GitHub

Professional Experience

Programs Coordinator – CDAP | HiTech Blitz Consulting Inc. | Mar 2025 – Present

- Deliver hands-on technical training in Python, SQL, and Power BI to 50+ program participants
- Develop structured curriculum modules covering data analysis, visualization, and database management
- Improved program completion rate by 30% through workflow optimization and personalized mentoring

Data Analyst Supervisor – Malaria Consortium | Jun 2022 – Oct 2023

- Led data analytics team in creating 15+ interactive Power BI dashboards for malaria intervention programs across 6 states, directly supporting strategic decisions affecting 2M+ beneficiaries
- Reduced manual reporting overhead by 50% through automation of ETL pipelines integrating DHIS2, Excel, and field data sources
- Developed time-series forecasting models achieving 85% accuracy in predicting stock-out risks, enabling proactive inventory management
- Trained 30+ program officers on dashboard usage and data-driven decision making

Project Manager (Data Focus) – Save the Children, ANRIN Project | Aug 2021 – Jun 2022

- Designed and deployed automated dashboards tracking pharmaceutical distribution across 200+ health facilities
- Implemented predictive analytics identifying supply chain bottlenecks 2 weeks in advance, improving delivery efficiency by 35%
- Integrated heterogeneous data sources (field logs, inventory systems) into centralized analytics platform
- Conducted training workshops for 25+ field officers on interpreting analytical outputs and KPIs

Education

Doctor of Veterinary Medicine | University of Ibadan | 2021

Certifications

• Data Scientist Professional – DataCamp (2025)

• Data Analyst Professional – DataCamp (2025)

• Google Data Analytics Certificate – Coursera (2024)