

Abena Fosuaa Gyasi | AI Specialist | MSc Artificial Intelligence

Loughborough, UK

📞 +44(0)7555820567 • ✉️ abenafosuaagyasi111@gmail.com
in <https://www.linkedin.com/in/abena-fosuaa-gyasi-84982219a/>
🐙 <https://github.com/GirIEf>

Profile

Dynamic and results-driven AI specialist with a strong foundation in machine learning, computer vision, and healthcare applications. Expert in Python, PyTorch, and TensorFlow, with hands-on experience in developing deep learning models for medical image classification, IoT security, and real-world AI solutions. Currently pursuing an MSc in Artificial Intelligence at Loughborough University, building upon a background in Computer Engineering. Passionate about utilizing AI for social impact and developing innovative solutions to bridge the gap between research and application.

Education

Loughborough University

MSc in Artificial Intelligence

Focus Areas: Deep Learning, Computer Vision, Natural Language Processing

UK

2024–Present

University of Energy and Natural Resources

BSc in Computer Engineering

Final Year Project: Fingerprinting of IoT devices using machine learning

Ghana

2018—2022

Technical Skills

Programming Languages: Python, C++, HTML/CSS

AI/ML Frameworks: PyTorch, TensorFlow, Scikit-learn, OpenCV, MATLAB

Core Competencies: Convolutional Neural Networks, Transfer Learning, Image Classification, Feature Extraction

Software Tools: Visual Paradigm, AutoCAD Electrical, Microsoft Office Suite

Networking & Systems: Cisco Packet Tracer, Huawei Routing & Switching (Certified)

Professional Experience

AND Construction Ltd - Industrial Procurement
I.T. Technician / Administrator

UK
2024

- Optimized and maintained company network infrastructure, achieving a 15% improvement in system uptime.
- Spearheaded the technical management of the procurement process, streamlining quote generation and order processing.
- Led the development and maintenance of the company website, significantly enhancing online visibility and customer engagement.

Electricity Company of Ghana
Graduate Trainee - Technical Operations

Ghana
2022–2023

- Diagnosed and resolved hardware and network problems for 200+ employee workstations, ensuring minimal downtime.
- Integrated a digital payment system, reducing transaction processing time by 25%.
- Coordinated the smart meter registration program, onboarding 500+ customers in less than 6 months.

AngloGold Ashanti Health Foundation
Information Technology Intern

Ghana
2021

- Managed and optimized hospital network systems that support 50+ healthcare providers, improving system reliability.
- Enhanced the performance of the Hospital Management System by optimizing database queries, improving response time by 30%.
- Assisted in establishing secure data backup protocols to safeguard patient information.

Research Projects

Melanoma Classification System: Developed a CNN-based skin lesion classification model, achieving 87% precision. Applied advanced preprocessing techniques, including augmentation, and leveraged transfer learning using pretrained models (ResNet50, EfficientNet).

Object Recognition System: Designed and compared multiple image classification architectures (VGG-16 vs. custom CNN), achieving 92% accuracy with a data set of 48,000 RGB images. Optimized model training through hyperparameter tuning and regularization.

Anomaly Detection in Time-Series Data: Developed an unsupervised learning system using Z-Score and DBSCAN clustering for anomaly detection in industrial sensor data, achieving a precision rate of 94%.

IoT Device Fingerprinting: Created a machine learning-based system for identifying IoT devices by analyzing network traffic patterns, achieving 89% accuracy across 15+ device types.

Certifications & Training

2022: Huawei Routing and Switching Certification

2021: UENR Robotics Club Training Program

Interests

Machine Learning Research | Medical Imaging & Diagnostics | AI-driven Applications | Music