

DACOSTA AGYEI

Applied AI and Computer Vision Engineer | Python, PyTorch and FastAPI

Accra, Ghana

PROFESSIONAL SUMMARY

Applied AI and computer-vision engineer with peer-reviewed research and hands-on product experience spanning image recognition, vision transformers, image-based score capture, and document-image extraction. Builds AI-enabled systems with Python, PyTorch, and FastAPI and integrates them into usable React and Flutter products.

TECHNICAL COMPETENCIES

AI and computer vision: PyTorch, vision transformers, image recognition, OpenAI vision

Machine-learning engineering: Python, FastAPI, data curation, model integration and evaluation

Data and platform: PostgreSQL, MySQL, Docker, Git, REST APIs

Product delivery: React, Flutter, JavaScript, secure full-stack development

PROFESSIONAL EXPERIENCE

Head of Unit, Secure Programming and Software | Public Sector Organisation — Confidential

Accra, Ghana | June 2025 - Present

Applications Developer (Contract) | DigiJob

Lome, Togo | Remote | August 2023 - August 2025

- Delivered ReactJS development for PichaStock, strengthening product-integration experience for data-driven features.

Software Engineer | ZK Block

Accra, Ghana | Hybrid | February 2023 - May 2025

- Built maintainable cross-platform product interfaces and transaction workflows using React Native and React.

Applications Developer | Escripts Solutions

Accra, Ghana | February 2022 - February 2023

- Integrated application APIs and delivered Flutter workflows for the MedFind e-pharmacy product.

IT Manager / Applications Developer | Daakye Welfare Fund

Koforidua, Ghana | Remote | 2019 - 2022

- Designed data-backed member, contribution, loan-processing, and reporting workflows.

SELECTED AI, VISION, AND RESEARCH WORK

A Modified Hierarchical Vision Transformer Model for Poultry Disease Detection | Co-Author | Published 2025

- Contributed data curation, methodology, software, and original-draft writing to the peer-reviewed IET Image Processing article.
- The published model achieved 90.90% average validation accuracy.

Technology: Python, PyTorch, vision transformers, computer vision | [Publisher record](#)

Presence360 | Sole Full-Stack Developer

- Developed a computer-vision-assisted attendance platform with enrolment, attendance history, and notification workflows.

Technology: Python, FastAPI, React, PostgreSQL, Docker, computer vision

AI-Assisted Election Results Collation | Sole Full-Stack Developer | Prototype - not deployed

- Built a proof of concept for photographed statement-of-poll capture, figure extraction, arithmetic checks, and structured result submission.

Technology: Flutter, FastAPI, OpenAI vision model

EDUCATION

MSc Computer Science

University of Ghana | 2024

BSc Information Technology, First Class Honours

Ghana Communication Technology University | 2021

SELECTED CREDENTIALS

MSc Computer Science | Deep Learning Specialization - DeepLearning.AI | Data Science - ALX | Google Data Analytics