

Musah Ibrahim Ali

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Professional Summary

Results-driven Full Stack Developer with extensive experience designing, developing, and maintaining high-performance web and mobile applications. Proven ability to build and integrate robust backend systems, server-side logic, and RESTful APIs using Python and Node.js, and to create user-centric frontends with React and React Native. Skilled in the complete software lifecycle, from UI/UX design and API integration to CI/CD implementation, security, and performance optimization.

Core Competencies & Technical Skills

Category	Skills
Frontend	JavaScript (ES6+), React, HTML5, CSS3, Chart.js, UI/UX Design Principles
Backend	Python (Flask, Django), Node.js, RESTful API Development, API Integration
Mobile	React Native, Android (Java/Kotlin), Flutter, Swift
Databases	PostgreSQL, SQL Server, Database Migration & Optimization
CI/CD & DevOps	Git, GitHub Actions, CircleCI, Docker, Agile Methodologies

Security	OAuth2, HTTPS/SSL Implementation, User Data Protection
Collaboration	User-Centric Design, Team Collaboration, Technical Documentation
Design Tools	Figma wireframing, Canva, Adobe XD wireframing, Photoshop

Professional Experience

Full Stack Developer | Turing (Remote) | *Mar 2020 – Sep 2022*

- Designed, developed, and maintained full-stack web solutions for diverse US-based clients, including Open-labs and Woodside Homes.
- Built and integrated robust backend systems and RESTful APIs using Python, enabling seamless communication between services.
- Developed responsive, user-centric frontend interfaces using React, collaborating closely with UI/UX designers to deliver exceptional user experiences.
- Participated in agile development cycles, implementing performance optimizations and responding to user feedback to refine features.

Software Developer | Core Extreme (Remote) | *Jan 2018 – Dec 2020*

- Led the end-to-end development of scalable software products, including e-commerce web stores and digital transport systems.
- Engineered and deployed a public-facing mobile application to the Google Play Store, managing the full development lifecycle.
- Architected backend logic for data processing and built secure APIs to serve both web and mobile clients.

Backend Developer | Hover Homes (Accra, Ghana) | *Apr 2021 – Nov 2021*

- Created and unified a central RESTful API to serve as the single source of truth for both web and mobile front ends.

- Optimized and refactored an existing PostgreSQL database to improve query performance, reliability, and data integrity.
- Collaborated closely with the frontend team to document API endpoints and ensure seamless integration.

Software Developer / UI/UX Designer | Software Aroma Inc. (Remote) | Jan 2015 – Dec 2017

- Refactored legacy codebases and successfully migrated applications and databases to modern technology stacks.
- Designed and implemented intuitive UI/UX for a range of web, mobile, and desktop applications, establishing a strong foundation in user-centric design principles.

Research Assistant/Machine Learning Engineer | Responsible AI Lab (RAIL), KNUST (Kumasi, Ghana) | Aug 2022 – Current

- Contributed to complex software projects, focusing on backend model optimization and data pipeline development.
- Authored and maintained technical documentation for application processes to ensure team collaboration and knowledge transfer.

KTP Associate | SesiTechnologies (Kumasi, Ghana) (January 2025 – October 2025)

- Served as the associate for a Knowledge Transfer Program (KTP), a collaboration between KNUST and Manchester Metropolitan University.
- Collaborated on "FarmSense," a full-stack precision agriculture platform integrating robotics hardware with web and AI technologies.
- Collaborated on a robust Django backend to manage data ingestion from hardware, process soil analysis, and serve ML predictions.
- Implemented and deployed machine learning models to analyse soil properties, predict crop yield, and recommend NPK fertilizer levels.
- Contributed to the development of a cross-platform (web and mobile) dashboard using Flutter to present actionable insights to farmers.

Selected Full-Stack Projects

E-commerce Platform (from Core Extreme experience)

- Architected and built a complete, full-stack e-commerce solution featuring a product catalog, shopping cart, and user authentication.
- Integrated a third-party payment gateway and implemented security measures (OAuth2, SSL) to protect user data.
- Designed a RESTful API to manage inventory, orders, and user accounts.

Digital Transport System (from Core Extreme experience)

- Designed and deployed a full-stack transport management system to coordinate logistics.
- Developed a backend service in Python to process real-time data and serve it via a RESTful API to mobile clients.
- Built a web-based administrative dashboard using React and Chart.js to visualize system activity and key performance indicators.

FarmSense (from SesiTechnologies)

- Collaborated on a full-stack precision agriculture platform to aid local farmers by integrating robotics hardware with web and AI technologies.
- Collaborated on a robust backend using Django to manage data ingestion from hardware, process soil analysis, and serve predictions.
- Implemented and deployed machine learning models to analyse soil properties, predict crop yield, and recommend NPK fertilizer levels.
- Contributed to the development of a cross-platform (web and mobile) dashboard using Flutter to present actionable insights to farmers.

Education & Certifications

MSc Data Science (University of East London - Distance) (Ongoing)

B.Sc. Electrical/Electronic Engineering (KNUST, Kumasi, Ghana)

Android Developer Certification (Google)

Graphic & Web Design Certification (CYBERG CONSULT, KNUST)

Huawei HCIA Routing and Switching (Huawei)

AI & Machine Learning Certification (RAIL - KNUST)

AI, ML and Robotics Trainer certification (RAIL – KNUST)

AlgoExpert ML Certification (AlgoExpert)

AlgoExpert Data Structures and Algorithms Certification (AlgoExpert)

Languages

- English (Fluent)
- Asante Twi (Native)
- Hausa (Conversational)

REFERENCES

- Prof. Jerry John Kponyo
Dean, Quality Assurance and Planning Office, KNUST,
Project Lead: KNUST ENGINEERING EDUCATION PROJECT (KEEP),
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