

Education

Ghana University of Ghana 2018 | 2022

- Bsc in Agricultural Economics.

Ghana ALX Africa 2023 | 2024

- Certificate in Software Engineering.

Work Experience

Software Engineer LayerCake Dec 2024 – Present

Ghana

- Developed and launched the core Calendar and Scheduling feature for the iSports Teams app, currently utilized by professional organizations including the Brisbane Lions (AFL) to manage elite athlete workflows.
- Engineered a cutting-edge middleware agent that streamlined GPU server orchestration using Web-Socket, Docker, and NVIDIA SMI, significantly enhancing system performance and scalability.
- Engineered key features for a sports video analysis platform using React.js, Electron.js, and video-processing libraries to allow coaches to draw insights from matches.
- Boosted application performance and SEO by 50% by implementing Next.js features such as Incremental Static Regeneration (ISR) and Edge Caching for optimal rendering and load times.

Backend & Cloud Developer Amalitech April 2024 – December 2024

Kumasi, Ghana

- Led the development of key features of a comprehensive Learning Management System featuring real-time messaging capabilities using Spring Boot, React, WebSocket, and AWS, enabling synchronous collaboration for users
- Built secure backend applications incorporating OAuth2 authentication, MySQL databases, and Redis caching, with automated deployment using Docker and Jenkins CI/CD pipelines
- Architected and implemented scalable microservices using Spring Boot, RabbitMQ, and Kubernetes, ensuring high availability and system resilience

Frontend Developer Melo Technologies June, 2023 – November, 2023

Ghana

- Designing and implementing pixel-perfect UI components to ensure an intuitive and visually appealing client interface
- Leveraging React.js to create efficient and reusable components, enhancing scalability and maintainability of the codebase.
- Expertly managing complex states within React components using Redux Toolkit, optimizing performance and enhancing user experience.

Frontend Developer BPO Tech June 2023 – December 2024

Remote

- Architected and deployed a centralized Training Center Platform for real estate agents, streamlining the delivery of course content and video recordings to 1000s of users.
- Engineered high-performance video streaming and storage solutions, implementing optimization techniques that reduced latency and ensured seamless playback for remote learners.
- Boosted application responsiveness by 50% through the strategic implementation of response caching and front-end performance tuning.

Software Developer

Npontu Technologies

July 2022 – December, 2022

Remote

- Collaborated with cross-functional teams to develop high-quality web applications, resulting in improved user experience and customer satisfaction.
- Developed functional and responsive web applications using laravel and bootstrap that ensured consistent user experience across various devices and platforms.

Skills

- Programming Languages: Javascript, PHP, Python, Java, C
- Frameworks: Nextjs, Laravel, Expressjs, Springboot, Fastapi, Electronjs, React Native
- Databases: Postgresql, Mysql, MongoDB, Firebase, Redis
- Devops: AWS, Jenkins, Docker, Kubernetes

Projects

- **Hotjobs Africa Job Portal** Developed a full-scale recruitment marketplace featuring a three-tier dashboard architecture for Admins, Recruiters, and Candidates; engineered an automated monetization system via Paystack API for recruiter packages and utilized Bootstrap to deliver a responsive, high-performance user experience. Laravel, Botble CMS, Paystack
- **Proximity** Developed an innovative proximity-based service discovery platform using Spring Boot and PostGIS, enabling seamless connections between service providers and seekers within a specific geolocal area. The platform efficiently matched local services with users, while integrated review and sentiment analysis—powered by Stanford NLP—provided actionable insights from user feedback to enhance service quality. Springboot, Postgis, Postgresql Springboot, Postgis, Paystack
- **GPU Orchestration Middleware** Developed a cutting-edge middleware-agent container provisioning infrastructure system designed to dynamically partition servers based on GPU requests. Leveraging WebSockets for real-time communication, FastAPI for high-performance API endpoints, Docker for containerization, and NVIDIA tools for GPU management, the system enabled efficient, on-demand allocation of server resources. This innovative solution not only streamlined server utilization but also enhanced scalability and responsiveness, ensuring optimal performance in high-demand environments Fastapi, Python, Nvidia smi, dockerpy
- **Training Center Platform** Converted high-fidelity Figma designs into a fully functional React application featuring video streaming, an admin dashboard for content management, and granular user roles and permissions. Utilized React Query for efficient data fetching and state management across components. React, React Query, Mantine ui

Certifications

- **Mckinsey Africa Forward Alumni** (Mckinsey Africa) 2024
- **Google Africa Developer Scholarship Programme** (Google) 2021