

Mr. Ernest Kwabena Asare

Software Engineer

✉ ernestasare2411@gmail.com ☎ +233504568396 📍 Accra, Ghana 🌐 Ernest Kwabena Asare
🔗 quantum-ernest 🔗 Portfolio

👤 ABOUT ME

I am a Software Engineer with a proven ability to lead and deliver high-impact automation and ERP projects. I am skilled in multiple programming languages and frameworks, with a focus on creating efficient, scalable solutions. Known for guiding cross-functional teams to success and continuously expanding my expertise to stay ahead of industry trends.

🧠 SKILLS

Back-End: Python(FastAPI, Django, Flask, Odoo), Go(Gorilla mux), JavaScript(Express), REST, GraphQL, SOAP, gRPC | **Front-End:** React, Vue.js | **Tools:** Git, AWS, Ansible, Grafana, Kafka, Docker, Kubernetes, Prometheus, Looker Studio, Elasticsearch, Nginx, Caddy, WordPress, LDAP, Linux, Github Actions |
Databases: PostgreSQL, MySQL, MongoDB, Redis

👛 PROFESSIONAL EXPERIENCE

The Quantum Group Limited

11/2022 – present

Software Engineer (Automation - Team Lead)

- **Fuel Station Automation:** Implemented a real-time Fuel Station Management and Monitoring system that reduced average reporting time and station losses by 25% while improving operational efficiency. Developed an ERP solution for configurations, reporting, and price adjustments, accelerating decision-making processes.
- **Remcash Payment Gateway:** Integrated Telecel Cash API and developed secure encryption and compliance services, achieving full AML & KYC compliance. Created a streamlined onboarding system that reduced customer onboarding time by 40%.
- **Fuel Truck Automation System:** Engineered a real-time tracking solution for GPS, temperature, and fuel volume data in fuel trucks, improving fuel management and preventing theft. Integrated ERP applications for seamless device synchronization and efficient management.
- **Lunch Ordering System:** Designed and developed backend services for the system serving over 1,000 employees, ensuring robust performance, efficiency, and scalability.
- **Fleet Management System:** Devised and built a robust system supporting the Galileosky 7x device, with features like real-time tracking, automated notifications, driver metrics, and downloadable vehicle history. This system currently manages over 100 vehicles across multiple locations.
- **Cylinder Bottling Automation:** Led the development of a QR code reader system, increasing data accuracy and reducing production time by 45% using RS-485 serial communication.
- **Website Repository Management:** Managed a centralized repository for company applications, implementing LDAP-based access controls to enhance security and streamline user access.
- **Odoo:** Successfully migrated custom Odoo modules between versions, ensuring a seamless transition while preserving data integrity, and demonstrated expertise in customization and module development by translating business requirements into effective ERP solutions.

- Managing and maintaining a time tracker application, ensuring timely and accurate tracking of work hours.

University of Ghana Computing Systems

10/2021 – 10/2022

IT Security Specialist

- Researched social engineering attacks, identified vulnerabilities, and implemented countermeasures. Analyzed survey data to improve student experiences and configured VoIP systems to enhance communication and productivity.

EDUCATION

Bsc. Computer Science

2017 – 2021

University of Ghana

General Science

2014 – 2017

Nsaba Presby Senior High

CERTIFICATES

- | | | |
|---|--|--|
| • Introduction to Back-End Development(Meta) ↗ | • Software Security (University of Maryland, College Park) ↗ | • Programming in Python(Meta) ↗ |
| • Usable Security (University of Maryland, College Park) ↗ | • Introduction to TCP/IP (Yonsei University) ↗ | • Fundamentals of Network Communication (University of Colorado) ↗ |
| • Introduction to Git and GitHub(Google) ↗ | • Linux Fundamentals (LearnQuest) ↗ | • Cryptography (University of Maryland, College Park) ↗ |
| • Introduction to Cybersecurity Tools & Cyber Attacks (IBM) ↗ | • Data, Data, Everywhere(Google) ↗ | |

PROJECTS

Relevant Projects

- **cmscribe**: AI-powered commit message generator that leverages various AI providers to create meaningful commit messages from your code changes (PyPi [↗](#))
- **TiaLinks**: An open-source URL shortener with built-in analytics, helping developers and businesses manage, track, and analyze links easily.
- Designed and built a backend service for an NGO's course management platform, allowing mentors to create courses, assign projects, and support mentee registration and grading, with multiple mentors per course.
- Developed a desktop application leveraging a deep-learning image classifier for accurate facial recognition-based student attendance management, achieving a 98% accuracy rate.
- Worked on a review app for customers to leave feedback on all registered products on the platform

Final Year Project

- Built an intelligent video surveillance system for deterring, detecting, and preventing unauthorized personnel from entering restricted areas.

ARTICLES

Email OTP Authentication [↗](#)

10/2024

Medium