

KAWUKI PATRICK SHAWUKIE

NAIROBI, KE

PROFESSIONAL SUMMARY

Seasoned full stack software engineer with a penchant for cybersecurity and an insatiable curiosity for how complex systems tick and occasionally, why they don't. With a strong foundation in secure coding, threat modeling and network protocols, I create solutions that are not only functional but fortified. I'm highly proficient in various languages and frameworks but my strength lies in thinking critically and building deliberately. That said, I believe the best code is written with a smile. Humour is an underrated design pattern. It keeps the team sane, sparks creativity and reminds us we're humans behind the syntax.

EXPERIENCE

June 2024 - Present

Software Engineering Apprentice

Moringa School - Nairobi, KE

- **Owned backend architecture and quality** by designing and implementing a Python, Flask + PostgreSQL API from scratch. Wrote 150+ pytest unit and integration tests to achieve 90 percent coverage thereby eliminating critical bugs in production.
- **Created interactive API documentation** with Swagger + OpenAI, defined every endpoint, request and response schema, example payload, halving new hire ramp up time and ensuring consistent integrations across teams.
- **Developed a responsive react frontend** with Redux Toolkit, real time form validation and a streamlined booking workflow for over 100 listings.
- **Built a CI/CD pipeline** using Docker and Github Actions to automate linting, testing and deployment to Heroku in under 10 minutes reducing manual release effort by 80 percent.
- **Boosted performance** with Redis caching and targeted PostgreSQL indexing thereby slashing average API response times from approximately 300 ms to 100 ms under load.
- **Hardened security** by implementing OAuth 2.0 authorization and multi-factor authentication, role based access control, input validation and threat modeling sessions.
- **Enforced code quality** across various repositories with ESLint, Prettier and Husky pre-commit hooks, reducing style and lint related PR feedback by 70 percent.
- **Implemented observability** with Winston logging, the ELK stack and Grafana dashboards cutting mean time to detection from hours to under 30 minutes during testing.

- **Led peer training** delivering two hands-on workshops on test driven development and Git best practices hence accelerating cohort onboarding by 40 percent.
- **Integrated analytics** via Google Analytics and Mixpanel custom event tracking thereby enabling data driven optimizations that reduced key funnel drop off by 20 percent.
- **Rolled out user centric features** like Twilio SMS + email fallback for password resets which served 200+ requests with 99 percent delivery thereby boosting capstone project satisfaction.
- **Conducted load testing** with JMeter to pinpoint throughput bottlenecks and optimized endpoints for 3x better concurrent request handling.
- **Collaborated with UX/UI designers** to build an accessible, mobile responsive interface thereby achieving a 94 percent lighthouse accessibility score on core workflows.
- **Created a scalable microservices module** to decouple the authentication system from the core API. Used gRPC for internal service communication and Docker compose for isolated local development boosting modularity, reducing deployment time by 50 percent and enabling future services for example billing to plug in with zero down time.

TECHNICAL SKILLS

Cloud and Infrastructure:



Languages and Frameworks:



Data, DevOps and Tools:



CONTACT INFORMATION

