

KWENA KOMAPE

Software Engineer

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PROFESSIONAL SUMMARY

Software Engineer with 2+ years of experience designing and delivering production software across enterprise SaaS, healthcare, and B2B commerce platforms. Experienced in owning products end-to-end—from architecture, database design, REST APIs and authentication to intuitive user experiences, AI integrations and cloud services. Recognised for translating complex business requirements into scalable, maintainable software with a strong focus on product quality, usability and long-term engineering excellence.

PROFESSIONAL EXPERIENCE

Software Engineer | NewIQ

March 2026 – Present

Develop enterprise SaaS software for Beverage Intelligence, a B2B platform supporting one of Africa's leading wines & spirits distributors operating across approximately 25 African countries.

- Led end-to-end development of the Customer Success Dashboard, designing aggregation APIs that unified MongoDB, SQL Server ERP and Open edX data into customer health insights, revenue and budget-pacing analytics, activity timelines, CSV exports and the data-context layer powering an AWS Bedrock AI assistant.
- Designed and built a gamified, offline-capable Progressive Web App (Vue 3, Vite, Pinia) that helps venue staff learn product knowledge through AI-scored spoken assessments (AWS Transcribe + Bedrock), featuring live leaderboards, AI-generated learning content and manager tooling for running training rounds
- Redesigned complex workflows to improve usability, accessibility and user engagement while reducing cognitive load across internal applications.
- Optimised backend APIs, database queries and application architecture for improved scalability, maintainability and production reliability.
- Researched and designed a Google Workspace CRM architecture using Gmail API, Calendar API and OAuth 2.0.

Founding Software Engineer | STDNT GEAR

April 2024 – Present

Designed and built a production-ready B2B custom apparel platform managing the complete customer journey from product discovery and quotation to invoicing, production and fulfilment.

- Architected a React customer storefront, React staff portal and Node.js/Express REST API backed by PostgreSQL.
- Built an advanced quotation engine supporting product variants, artwork uploads, print customisation, personalisation, draft persistence and guest-to-user migration.
- Engineered secure authentication using Google OAuth 2.0, JWT, refresh token rotation, audit logging, account protection and rate limiting.

- Developed quote-to-order workflows including PDF generation, invoicing, transactional emails, production tracking and operational exports.
- Implemented contextual search across 3,000+ products using optimised PostgreSQL queries, indexing, caching and React Query performance optimisations.
- Engineered a data-ingestion pipeline syncing the full product catalogue (products, prices, stock and colour swatches) from a third-party vendor API into PostgreSQL using batched upserts, concurrency control and deadlock retry; deployed the platform to production.

Software Engineer Intern | Sports Science Institute of South Africa

July 2024 – June 2025

- Built healthcare booking and operational systems using React, Node.js, Express and MySQL.
- Developed REST APIs, authentication, role-based access control and notification workflows using SMS and email integrations.
- Built an internal IT asset management platform with reusable React architecture and responsive dashboards.

TECHNICAL EXPERTISE

Languages: JavaScript, TypeScript, SQL, Python, Java, C#

Frontend: React, Vue 2/3, Nuxt, Vite, Tailwind CSS, TanStack Query, Framer Motion, Vuetify, Chart.js

Backend: Node.js, Express, REST APIs, JWT, OAuth 2.0

Databases: PostgreSQL, MongoDB, SQL Server, MySQL, Redis

Cloud & AI: AWS Bedrock, AWS Transcribe, S3, CloudFront, Elastic Beanstalk

Developer Tools: Git, Docker, Postman

EDUCATION

Bachelor of Science in Computer Science
University of Cape Town
2023