

Ali AlQattan



Software Engineer — AI & Developer Tooling

Manama, Bahrain · +973 38908908 · ali.al8attan@gmail.com

[Portfolio & contact](#) · [GitHub](#) · [LinkedIn](#) · [Vox project](#)

Profile

Software engineer with over six years shipping production software, currently building the automation and platform layer for a licensed bank on multi-region AWS: Terraform-managed infrastructure across Bahrain and Ireland, Jenkins CI/CD, Python/boto3 automation that replaced manual console work, an internal operations console the operations team uses daily, and monitoring with anomaly detection for AML and payment systems. Outside the bank, ships complete products alone — a local voice runtime and MCP server used by AI coding agents, an agent-supervision harness covered by over 1,000 automated assertions, a zero-dependency Anthropic Messages API proxy, Flutter apps on the App Store and Google Play, and CLIs and web tools in TypeScript, Python and Go. Owns a system end to end: requirements, architecture, code, CI, release, and the verification that proves it works, in an environment where every change is audited.

Experience

Software / Infrastructure Engineer — AWS Platform & Automation

Bank ABC (ila Bank) · Nov 2022 – present

- Run day-to-day AWS operations for a licensed digital bank across dev, UAT, SIT and production accounts — deployments, incident response, access and change management in a regulated, audited environment.
- Architected and maintain multi-region AWS infrastructure across Bahrain (me-south-1) and Ireland (eu-west-1) — EC2, RDS, EKS, Lambda — on reusable Terraform modules; automated security-agent rollout across both regions with Ansible.
- Automated repetitive operations and database-security workflows with Python/boto3 and CI pipelines, replacing manual, error-prone steps; built the operations console the ops team uses daily and the monitoring with anomaly detection for AML and payment systems.
- Built CI/CD pipelines (Jenkins, GitHub Actions) and internal operations tooling; partnered across engineering, security and operations to gate changes and protect the reliability and security of mission-critical banking systems.

Service Desk — Investigations (outsourced contractor)

ila Bank · Jan – Nov 2022

- Investigated and resolved customer issues on the digital bank's service desk before moving to the cloud operations team.

Independent Software Developer

Freelance · 2020 – 2022

- Shipped cross-platform mobile and web products end-to-end (Flutter, React, Node.js) — including NFTAlbum, a Flutter app on iOS and Android, and a WhatsApp news-automation pipeline for AlBilad Newspaper that cut breaking-news distribution to thousands of subscribers from hours to under three minutes.
- Built and released production apps solo: requirements, architecture, implementation, testing and deployment.

Website & Mobile Developer

Quality Code · May – Nov 2019

- Built an employee-management platform with Bahrain Qualification Authority compliance forms, adopted by 17+ institutes in Bahrain.
- Promoted to leader of the ICT team.

Selected engineering work

Vox — Local Voice Runtime and MCP Server for AI Agents

A local-only voice runtime that gives Claude Code, Codex and any MCP client a shared microphone and speaker. Speech-to-text and text-to-speech run on the machine through whisper.cpp and Kokoro, and the runtime refuses to start unless every speech endpoint resolves to a loopback address — no audio leaves the Mac. Split into a persistent audio daemon and small reconnectable MCP adapters, with an explicit OFF → IDLE → LISTENING / SPEAKING lifecycle: competing turns from several agents queue in arrival order with a bounded wait, and cancel / stop drain the queue instead of orphaning it. System-wide hotkeys, a floating waveform indicator, watchdog health probes with bounded restarts of the local speech services, and replay and diagnostics controls.

Python · Model Context Protocol (MCP) · whisper.cpp · Kokoro · macOS audio and global-hotkey APIs · daemon / IPC

exidex.dev/vox · private repository, public landing

Skills

AI Agent Tooling: Model Context Protocol (MCP) servers; Anthropic Messages API; coding-agent workflows (Claude Code, Codex); agent harnesses and supervision; prompt-injection mitigation for agent output; local speech (whisper.cpp, Kokoro)

Languages: TypeScript / JavaScript, Python, Dart, Go, SQL, Bash; working Java and C#

Cloud & Infrastructure: AWS (EC2, RDS, EKS, Lambda, S3, IAM, CloudWatch) across a multi-account, multi-region banking estate; Terraform; Ansible; Docker; Linux; Python / boto3 automation

CI/CD & Delivery: Jenkins, GitHub Actions; build, test and promotion pipelines for containerised and serverless workloads; typecheck and test gating before merge; change and release management across dev, UAT, SIT and production

Backend & APIs: REST API design and integration; Node.js / TypeScript; Python (FastAPI, asyncio); local daemons, IPC and HTTP proxies; PostgreSQL, SQLite

Frontend & Mobile: Flutter / Dart (published to the iOS App Store and Google Play), React, Vite, Tailwind CSS, terminal UIs

Quality & Verification: Playwright, Cucumber (BDD), Cypress, Selenium WebDriver, k6, Apache JMeter; UI, API and database-level assertions; CI-gated suites that boot their own system under test

Practices & Domain: Agile delivery, SDLC, change control in a regulated bank, payment processing and AML monitoring, security-agent rollout (CrowdStrike, Wazuh, Splunk, Qualys), database security auditing

Education

Bachelor of ICT (Programming) · Bahrain Polytechnic

2013 – 2019 · Project of the Year award.