

Ali Akbari

Backend & Platform Engineer — Go, distributed systems, real-time data

Muscat, Oman · ali@aliakbari.dev · aliakbari.dev · linkedin.com/in/aliakbari1994 · github.com/akynte

SUMMARY

Software engineer in Muscat who has built real-time trading systems since 2020 and has operated production trading platforms since 2023: real-time data systems and scalable backend platforms. My work spans system architecture, API and service development, streaming data pipelines, performance engineering, observability, automated testing and technical documentation. I use AI coding agents in daily development, with every change validated through tests, logs and production evidence.

Based in Muscat and available for full-time on-site work. Open to roles in Oman, the UAE, Saudi Arabia and with remote-friendly teams.

EXPERIENCE

Backend & Platform Architect · TFLMarkets

Apr 2026 – Present · Muscat, Oman

- Architected and operate a multi-service trading platform in Go, Rust and TypeScript, including real-money purchase, wallet, payout and KYC workflows shipped through controlled, traceable releases.
- Built the real-time data path end to end: ingestion into Kafka with Avro schemas, WebSocket streaming to the web applications, and a custom WebGL chart renderer for live and historical data.
- Designed streaming and historical data services on TimescaleDB and QuestDB, serving live subscriptions and time-series queries.
- Delivered REST, gRPC and WebSocket APIs with schema governance and safe event processing (transactional outbox, idempotency, retry and DLQ).
- Built and maintain the observability stack (Prometheus, Grafana, Loki, Tempo, OpenTelemetry, Alertmanager) with alerts tied to customer impact; load-tested order placement and WebSocket fan-out with k6.
- Run an AI-first engineering workflow in production: written architecture specifications guide coding agents, and every change is checked with automated integration, end-to-end and load tests.

Technical Lead · TFL — Union for Global Trade & Investment LLC

Sep 2023 – Present · Muscat, Oman

- Lead architecture, system design and engineering standards for live trading platforms, and support production incident resolution.
- Set the team's development standards: specification-driven design, code review on every change, automated test gates and documented release processes; mentor engineers through reviews and written runbooks.
- Work directly with business stakeholders to gather requirements and turn them into clear technical specifications.

DevOps & Production Operations · TFL — original prop-trading platform

Feb 2023 – Present · Muscat, Oman

- Own deployments, CI/CD, monitoring, incident investigation, backups and recovery for a live customer-facing trading platform.

Independent FX Trader & Trading-Systems Developer · Self-employed

Feb 2020 – Sep 2023

- Built and ran personal real-time trading systems, including a MetaTrader 5 tick-streaming pipeline over raw TCP sockets into a Go/Rust gateway with gRPC server streaming.

Graduate Researcher · Amirkabir University of Technology (Tehran Polytechnic)

Aug 2016 – Aug 2020 · Tehran, Iran

- Published peer-reviewed research (Journal of Environmental Chemical Engineering, 2021) and ranked 2nd in the master's graduating cohort.

PROJECTS

BoundedCode · Personal project

github.com/akynte/boundedcode

- Built an AI coding agent's verification gate in Go: a change counts as verified only when a test it adds fails on the base commit and passes with the change. aliakbari.dev/proof/boundedcode-fail-before-pass-after
- Designed a crash-safe SQLite task ledger with lease takeover; recovery after SIGKILL is asserted by a CI test that kills a real runner process. aliakbari.dev/proof/boundedcode-crash-resume
- Contained adversarial agents: verification config is read from the base commit, protected paths are enforced, and a planted symlink cannot pull a host secret into a context pack (adversarial tests with a scripted agent). aliakbari.dev/proof/boundedcode-prompt-injection-containment

Project claims link to public tests and CI runs at a pinned commit.

TECHNICAL SKILLS

Languages	Go, Rust, TypeScript / Node.js, Python, SQL
Streaming and APIs	Kafka, Avro and Schema Registry, gRPC, REST, WebSockets, raw TCP sockets, Transactional outbox, Idempotency, Retry and DLQ
Data	PostgreSQL, PgBouncer, Redis and Sentinel, TimescaleDB, QuestDB, MinIO
Systems and observability	Linux, Docker, Docker Swarm, nginx, Cloudflare, Prometheus, Grafana, Loki, Tempo, OpenTelemetry, Alertmanager
Quality and delivery	k6, Testcontainers, Playwright, Vitest, GitHub Actions, GitLab CI
Front end (when needed)	Vue 3 / Nuxt, React, WebGL

EDUCATION

M.Sc., Mining & Mineral Engineering · Amirkabir University of Technology (Tehran Polytechnic)

2017–2020

Ranked 2nd in the graduating cohort.

B.Sc., Mining & Mineral Engineering · Amirkabir University of Technology (Tehran Polytechnic)

2012–2017

Top 1% in Iran's national university entrance examination.

Publication: Peer-reviewed article in the Journal of Environmental Chemical Engineering (2021).

LANGUAGES

Persian — Native · English — Strong written communication; conversational speaking