

Ashbeel Ghouri

Senior Software Engineer · Golang · Node.js · AWS

Software Engineer with 8+ years building high-performance, cloud-native backends in Golang, Node.js, and AWS. I design and scale event-driven microservices — CQRS, transactional outbox, saga orchestration, and zero-data-loss payment flows — and harden the APIs around them. I own systems end to end: architecture and data pipelines through to CI/CD, observability, and mentoring.

8+ yrs	99.95%	27	20+
EXPERIENCE	PRODUCTION UPTIME	GO SERVICES SHIPPED	FEATURES / QUARTER

EXPERIENCE

Software Engineer · Dscale for Research and DevelopmentMar 2024 – Present · Dubai, UAE

- Engineered **27 high-performance Go microservices** in a monorepo, shipping 20+ features per quarter on clean architecture — repository, dependency injection, API gateway, and interceptor middleware.
- Built **11 gRPC services (100+ RPCs)** with Protocol Buffers and gRPC-Gateway, exposed as REST through a single gateway with shared authentication.
- Applied **CQRS** across the platform: PostgreSQL as the write source of truth, with an event-envelope outbox streaming changes through Kafka into ClickHouse (analytics) and Algolia (search) read models.
- Built an event-driven backbone on **Kafka using the transactional outbox pattern** for reliable, ordered, exactly-once delivery — lifting system throughput **35%**.
- Modeled auction and payment lifecycles as durable **Temporal-orchestrated sagas**, with River (Postgres-backed job queue) running ad expiry, auction close, orders, and notification delivery with automatic retries.
- Integrated core banking APIs (Checkout.com, Lean) with River-based queuing for refunds and captures at **zero data loss**; secured inbound webhooks with per-provider signature verification and handler-level idempotency.
- Re-architected CI/CD solo into a **tag-based, environment-scoped release flow** shipping 20+ services to Azure AKS via GitHub Actions, Helm, and Kubernetes manifests, with versioned rollbacks.
- Kept the cluster efficient with per-service Horizontal Pod Autoscalers on live CPU/memory; cut **downtime 40%** and API response times **45%** with Redis caching.
- Redesigned the **Algolia search pipeline** end-to-end and led the data-engineering to clean and remodel search data — clearing indexing and quality issues unresolved for five years.
- Hardened auth: unified Apple / Google / UAE Pass / password sign-in (**+18%** success), central gRPC token interceptor, RBAC with per-key scoping, Authy OTP, and a Fibonacci-based lockout that cut brute-force attempts **70%**.
- Established centralized logging and distributed tracing with Grafana and Loki — error detection **+35%**, incident resolution time **–50%**; built AI auto-form filling on Google Gemini (**–60%** manual input).
- Delivered full-stack features — React / Next.js admin dashboards on a shared design system — plus solution designs, data-classification taxonomy, ADRs, and runbooks that guided delivery and onboarded engineers.

Stack: Go · gRPC · Protobuf · Kafka · Temporal · River · Redis · PostgreSQL · Algolia · ClickHouse · MinIO · Grafana · Loki · Kubernetes · Helm · Azure AKS · GitHub Actions · Supabase · Gemini · Firebase · React · Next.js · Product: [Ayshei](#)

Software Engineer · EIXJan 2022 – Jan 2024

- Maintained and enhanced multiple microservices, boosting performance, reliability, and maintainability against evolving client needs.
- Designed custom file and metadata integrations across Box, Adobe Workflow, Amazon Prime, XCM, and Marvel, improving data-flow efficiency **30%**.
- Built event-driven microservices on AWS Lambda, SQS, and SNS to automate downstream workflows, cutting manual intervention **40%**.
- Refactored legacy services to reduce technical debt and optimise resource usage, lowering cloud costs **20%**.
- Containerised services with Docker and tuned Dockerfiles / Docker Compose, reducing build times **35%**; debugged live AWS ECS deployments to reduce downtime.
- Mentored junior developers and led code reviews to enforce clean code and architectural best practices.

Stack: Node.js · Go · AWS Lambda · SQS · SNS · AWS ECS · Docker · Docker Compose · Product: [Tenovos DAM](#)

Software Engineer · TechtronixJan 2021 – Jan 2022 · Islamabad, PK

- Led development of a scalable event-management system in Golang and Node.js — real-time ticketing, streaming, and user check-in for live events.
- Architected a secure barcode e-ticket system, streamlining check-in and reducing fraud risk.
- Built AWS Step Function state machines to orchestrate asynchronous event workflows reliably.
- Built CI/CD on AWS (CodePipeline, CloudFormation) and GitHub Actions with CloudWatch logging; delivered critical hotfixes under live-event deadlines.

Stack: Go · Node.js · AWS Step Functions · CloudFormation · CloudWatch · CI/CD · Product: [Ticket Manager](#), Metrical

Full Stack Developer · FocusteckJan 2018 – Jan 2021 · Islamabad, PK

- Designed robust RESTful APIs in Node.js, Express, and PHP powering core workflows and third-party integrations.
- Delivered full-stack work with Angular frontends while focusing on backend architecture.
- Optimised MySQL and PostgreSQL with query tuning and indexing, improving performance **40%**.
- Containerised services with Docker / Docker Compose, contributed to Kubernetes workflows, and added rate limiting and API-key validation.

Stack: Node.js · Express · PHP · Angular · MySQL · PostgreSQL · Docker · Kubernetes · Redis · Product: [Ideawake](#)

CORE SKILLS

LANGUAGES · Go, Node.js, TypeScript, JavaScript, PHP

FRONTEND · React, Next.js, Tailwind CSS, Angular, Design systems

ARCHITECTURE · Microservices, Event-driven, CQRS, Transactional outbox, Saga (Temporal), DDD, Clean architecture, gRPC/Protobuf, ADRs

DATA & SEARCH · PostgreSQL, Algolia pipelines, Relevance tuning, ClickHouse, Kafka pipelines, Data engineering, Neon

SECURITY · JWT/session auth, OAuth & UAE Pass, OTP (Authy), RBAC, Rate limiting, Webhook signatures, Idempotency, Zero-data-loss payments

CLOUD & INFRA · Azure AKS, Kubernetes, Helm, HPA, Docker, GitHub Actions, GitLab CI/CD, Terraform, Nginx, Prometheus

INTEGRATIONS & AI · Google Gemini, Stripe, Firebase (FCM) push, Transactional email/SMS, Saleor (headless commerce), Hasura (GraphQL), Strapi CMS, Webhooks

SELECTED PROJECTS · EDUCATION & CERTIFICATION

Ayshei / DSCALE R&D

UAE classifieds & auctions backend: Go microservices behind a gRPC/REST gateway, real-time bidding, payments, multi-provider identity, Algolia search.

Index Exchange — XFI / DSCALE R&D

High-throughput exchange services with Kafka pipelines, Redis caching, Grafana/Loki observability.

jsonschematics / OPEN SOURCE

Go library validating JSON against declarative schematics — 20+ validators, custom operators, running in production.

materialgrammi / OPEN SOURCE

Material-inspired, mobile-first UI library shipped as standalone CSS and an Angular package.

EDUCATION

BS, Computer Software Engineering

Foundation University Islamabad, Rawalpindi

CERTIFICATION

Site Reliability Engineering: Measuring and Managing Reliability

Google Cloud, via Coursera · Jul 2022 · [Verify](#)

LANGUAGES

English