

# NIK AFIQ

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## PROFESSIONAL SUMMARY

Backend engineer with 3 years of professional experience building and operating Go-based distributed backend systems on GCP and AWS. Strong ownership mindset with end-to-end responsibility across architecture, implementation, deployment, production reliability, and continuous improvement. Known for mechanism-driven problem solving, clear technical documentation, and open knowledge sharing across teams. Hands-on production experience with high-throughput event-driven microservices, Kafka-based pipelines, Kubernetes, and cloud-native data platforms. Experienced in designing systems with strict reliability, ordering, idempotency, retry safety, security, and production-safe migration requirements. Applies AI/LLM tools with deliberate guardrails in daily workflows. Trilingual in English, Japanese (JLPT N1), and Malay.

## SELECTED HIGHLIGHTS

- Designed and operated a Kafka + GKE + Cloud Spanner backend pipeline for correctness-sensitive, high-throughput user data synchronization with per-account\_id ordering, at-least-once delivery, and durable retry handling.
- Architected event-driven backend services under constraints including 100–120 TPS steady load, 600 TPS burst, 1500 TPS downstream cap, and 1500 TPS sustained Spanner read traffic across two production services.
- Achieved ~30% fewer duplicate downstream calls via singleflight coalescing; separately refactored a 1500 TPS Spanner read service (hashed phone number lookup, removed non-indexed searches), cutting CPU by ~30%.
- Built cloud-native platforms across GCP, AWS, and Azure using Kubernetes, ECS/Fargate, Lambda, Aurora, DynamoDB, and Kafka.
- Trilingual engineer (English/Japanese/Malay) with daily cross-functional communication across Japanese and overseas teams.

## WORK EXPERIENCE

### 株式会社ホープス (Hopes Co., Ltd.) — Tokyo

Backend Engineer | Aug 2025 – Present

Dispatched to a major domestic telecommunications carrier as part of a next-generation carrier messaging platform initiative. Designing and operating a distributed GCP/GKE backend pipeline bridging high-volume upstream message delivery with a downstream consent fulfillment API.

- Designed system architecture and selected Kafka as the messaging backbone based on ordering, reliability, and scalability requirements under a 1500 TPS downstream global cap.
- Designed request coalescing with singleflight, reliable offset commit ordering (offsets committed only after durable Spanner writes), graceful shutdown, and a cronjob-based retry pipeline, achieving at-least-once delivery with no data loss on crash.
- Proposed and implemented hashed phone number lookup in Spanner to avoid access hotspots, eliminate non-indexed searches, and improve CPU efficiency under sustained load.
- Improved team development efficiency by optimizing GitHub Actions CI/CD workflows, scoping full test runs to pull requests, improving build cache usage, and reducing unnecessary image builds to shorten feedback cycles.
- Designed observability for distributed services using OpenTelemetry, Datadog, and tracing to improve production visibility and incident response.
- Authored architecture and design documents, including Kafka adoption rationale and request coalescing design, to align teams through clear written mechanisms.
- Strengthened security and compliance posture by designing logs to mask PII, implementing secure service-to-service authentication with Workload Identity, and enforcing least-privilege access controls.
- Applied AI tools (Copilot, Claude, Gemini, ChatGPT) in daily workflows with deliberate guardrails: output validated through testing and review, AI excluded from security-sensitive logic.

### 株式会社ニッポンダイナミックシステムズ — Tokyo

Full Stack Engineer, IT Solutions — Pharma Market Team | Apr 2023 – Jul 2025

Backend, cloud infrastructure, data platforms, and internal application development for enterprise clients, primarily on AWS with some Azure-based delivery.

- Built a scalable analytical DWH on Amazon Aurora for a pharmaceutical client, integrating Salesforce and multiple external sources via ECS/Fargate and Lambda ETL pipelines; designed for HA with Multi-AZ failover.
- Constructed a SaaS data lake using AWS CDK, Glue, TypeScript, and Python, automating ETL ingestion across heterogeneous data sources.
- Built a license authentication service using Node.js, Docker, Azure Web Apps, and Azure AD B2C; owned requirements definition through client delivery.
- Automated monthly maintenance operations (AMI updates, patching, regression testing, blue/green deployments) via AWS CodePipeline and Azure Pipelines.
- Mentored junior engineers on cloud architecture; functioned as bilingual (EN/JA) liaison between domestic and overseas engineering teams.

## SKILLS

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<b>Languages</b>	Go, Python, TypeScript/JavaScript
<b>Backend</b>	Distributed systems, event-driven architecture, microservices, REST APIs, pub/sub, concurrency, retry design, idempotency, fault tolerance, familiarity with Protocol Buffers and gRPC through personal projects
<b>Cloud — GCP</b>	GKE, Cloud Spanner, Managed Kafka, BigQuery, Cloud Trace
<b>Cloud — AWS</b>	ECS/Fargate, Lambda, Aurora/RDS, DynamoDB, Glue, CDK, CodePipeline, Bedrock, Secrets Manager
<b>Cloud — Azure</b>	Web Apps, Azure AD B2C, Azure Pipelines
<b>Data</b>	MySQL, Aurora, PostgreSQL, DynamoDB, Cloud Spanner, Kafka, Redis
<b>DevOps</b>	Docker, Kubernetes, ArgoCD, CI/CD, IaC (Terraform, AWS CDK, Ansible)
<b>Observability</b>	OpenTelemetry, Datadog, distributed tracing
<b>AI Tooling</b>	GitHub Copilot, ChatGPT, Gemini, Claude. Applied with guardrails: test-validated output, excluded from security-critical paths
<b>Security</b>	VPC, WAF, Security Groups, Secrets Manager, Workload Identity, Wiz

## CERTIFICATIONS

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AWS Certified Solutions Architect – Associate (SAA)	Oct 2024
AWS Certified Developer – Associate (DVA)	Dec 2024
AWS Certified Cloud Practitioner (CLF)	Apr 2024
基本情報技術者試験 (FE) — IPA Fundamental IT Engineer	Aug 2024
JLPT N1 — Japanese Language Proficiency	Dec 2022
<i>In progress: Applied Information Technology Engineer (AP)</i>	

## EDUCATION

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**Tokai University** | Graduated: March 2023  
Bachelor of Engineering | Major: Electrical and Electronic Engineering | Minor: Information Technology

## ADDITIONAL

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- **Languages:** English (business), Japanese (business, JLPT N1), Malay (native)
- **Homelab:** Self-hosted k3s cluster, Gitea, Ansible/IaC, ArgoCD — gitea.nik4nao.com (mirrored to github.com/nikafiq)
- **Dev blog / personal site:** nik4nao.com