Leong Yin Chan

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Summary

Software Engineer (Backend & Cloud) with a quantitative background and 1 year of experience. Focused on building resilient and data-driven solutions with Go on Google Cloud Platform. Recent work involved migrating services from Python to Go, and establishing CI/CD with GitHub Actions and Terraform.

Experience

Software Engineer (Contract) | Union Mate   *Feb 2025 – Jan 2026*

– Migrated 5 microservices from Python to Go, to address high memory footprint and cold-start latency. Implemented bounded worker pools, dropping P99 latency by 60% (<300ms) and reducing serverless GiB-seconds by 40%.
– Modernised deployment security by replacing long-lived keys with OIDC federation.
– Implemented the ingestion pipeline for complex engineering documents (SaaS prototype), benchmarking chunking and embedding strategies to achieve >90% retrieval accuracy against a client-validated golden dataset.

Projects

Geospatial Data Pipeline | Go, Terraform

– Automated the archival of stale Firestore data to GCS, reducing NoSQL read operations by 86% per request.
– Imported existing GCP resources into reusable Terraform modules to enable infrastructure-as-code and drift detection.
– Developed Go REST APIs with token-bucket rate limiting to guard resources.
– Implemented integration tests using Firestore Emulators.

RAG-Based AI Agent & Portfolio | Go, TypeScript, Next.js

– Built a RAG-based LLM agent utilising vector embeddings for semantic search.
– Implemented a chat interface using Next.js and streaming response handlers to render LLM tokens immediately upon generation.

Skills

Languages:	Go, Python
Cloud & Infrastructure:	Cloud Run, Firestore (NoSQL), GCS, Vertex AI, Pub/Sub, IAM & Security Policies
DevOps & Tools:	Terraform, Docker, GitHub Actions, Concurrency, RAG, Git
Certifications:	Google Cloud Certified - Professional Cloud Developer

Education

The Australian National University

Bachelor of Actuarial Studies	*Graduated Jan 2025*
Bachelor of Finance (Quantitative Finance)	*Graduated Jan 2025*

Leadership & Professional Development

Senior Resident | The Australian National University   *Jan 2023 – Dec 2023*

– Supervised a cohort of 26 residents, enforcing safety protocols and mediating conflict resolution as a first-responder for critical incidents.

- Earned two scholarships ($16,000 in 2023; $4,000 in 2020) for contributions to collegiate life and academic excellence.

Administrative Support Assistant | Singapore Armed Forces *Jul 2020 – May 2022*
- Managed scheduling and end-to-end logistics for officer training programs and service medal ceremonies, ensuring operational readiness and adherence to protocol.