

Jerome Goh

jerome.goh.work@gmail.com | (+65) 82486050 | LinkedIn | GitHub | Singapore

EDUCATION

National University of Singapore <i>Bachelor of Computing - Computer Science</i> CGPA: 4.53/5.0	Singapore Aug 2022 - May 2026
Coursework: Programming Methodology I & II, Parallel & Concurrent Programming, Data Structures & Algorithms, Software Engineering Teaching Assistant: CS2030 Programming Methodology II (Object-Oriented & Functional Programming), CP2106 Independent Software Development Project (Software Engineering)	

SKILLS

- **Languages:** Python, Java, TypeScript, C++, SQL, Bash
- **Backend:** FastAPI, Node.js, PostgreSQL, DynamoDB
- **Frontend:** React.js, Next.js, TailwindCSS, Tanstack Query
- **Infrastructure:** Linux, Terraform, Ansible, Docker, Prometheus, Grafana, Kubernetes, CI/CD, AWS
- **Certifications:** AWS Solutions Architect - Associate (SAA-C03)

EXPERIENCE

Bytedance <i>Software Engineer Intern</i>	Singapore Aug 2025 - Present
<ul style="list-style-type: none">• Contributed to a distributed logging, indexing, and querying system using Quickwit in Rust, integrating ByteMQ and TOS.• Developed a cloud-native migration of proxy cluster deployment from Ansible to Kubernetes using Kustomize, hosting numerous G3 proxies.• Engineered a GitOps pipeline using ArgoCD for state consistency and automated deployment.• Implemented a Kubernetes-wide logging pipeline using Vector Helm charts, deploying agent and aggregator components.• Designed a custom WebSocket middleware using goroutines and channels to demultiplex and distribute logs reliably.• Integrated Prometheus scrape jobs and push-based models for compute, cluster, and application metrics.	
Govtech Singapore <i>Software Engineer Intern</i>	Singapore Jan 2025 - Aug 2025
<ul style="list-style-type: none">• Implemented a FastAPI proxy service enabling seamless cross-team API integration.• Built AWS infrastructure (VPC, IAM, ECS, ALB/NLB) using Terraform with formatting and linting protocols.• Reduced CloudWatch costs by 20% and improved query performance by 30% using Python coroutines for concurrent log processing.• Resolved multi-account AWS performance bottlenecks using cross-account API Gateway, SQS, and Lambda reserved concurrency.• Integrated AWS Cognito with a custom Lambda trigger to synchronize user pools with PostgreSQL.• Designed a schema-merging solution preventing race conditions during writes.• Implemented a CI/CD pipeline using Flyway for controlled database migrations.	
Beep Technologies <i>Software Engineer Intern</i>	Singapore Dec 2023 - Jun 2024
<ul style="list-style-type: none">• Improved Google Maps performance by 50% in a PWA using debouncing, superclustering, and framer-motion animations.• Refactored the frontend state machine to support Anti-Idling feature and custom business logic.• Implemented a virtualized infinite listview for charging stations and sessions.• Introduced TanStack Query with generic/custom hooks, eslint, prettier, and husky pre-commit hooks.• Improved React Native UI consistency across Android and iOS.• Integrated push notifications using expo-notifications and backend middleware for inactivity-based logout enforcement.	

HONOURS & AWARDS

- 3rd Place Overall Best Project (ML/AI), Anaconda Data Science Expo 2023
- 2nd Place, NUS Fintech Summit 2024 (Tokka Labs Track)