Kawai Wong

Senior Backend / Platform Software Engineer

Last update: December 7, 2025

The online version is available at

• https://fancycoconut.github.io/cv

Residence

Auckland, New Zealand

LinkedIn

in kawaiw

GitHub

fancycoconut

Email

Key Achievements

- Contributed and led the development of next-gen Public API platform to enhance customer stickiness through integration
- Improved CI/CD throughput of new API endpoints by 70%, reducing deployment time from hours to minutes and significantly accelerating engineering delivery
- Introduced distributed tracing via OpenTelemetry across microservices and Lambda functions, improving bottleneck detection and reducing API latency
- Led migration of monolithic integration features into domain-focused microservices, increasing system resilience and reducing lead time for new integrations
- Built a new OAuth2 authorization server supporting code and client credentials flows, improving security and modernizing the API identity stack
- Established containerization strategy across teams, enabling consistent Docker/Kubernetes usage and improving operational reliability

Key Skills

Technical Skills

- Architecture: Distributed systems, event-driven design, microservices, API design, OAuth2, observability (Open Telemetry), rollout patterns
- Backend: Python, C#, .NET Core, ASP.NET Web API, Node.js (familiarity)
- Cloud & Infrastructure: AWS (API Gateway, Lambda, ECS, DynamoDB, RDS, S3, SQS, Kinesis), Azure, Terraform,
 Docker, Kubernetes, Postgres, SQL Server, RabbitMQ, Jenkins
- Frontend: React, TypeScript
- Other: GraphQL, Protobuf, CoAP

Professional Experience

Pushpay

Senior Software Development Engineer 2

Apr 2025 — Current

- Member of the team responsible for the Public API and integrations platform, enabling safe and predictable delivery of API changes across all customers
- Involved with the longer-term engineering strategy for Pushpay's next generation Public API such as REST API standards (naming, version control etc)
- Led the introduction of spec driven development via Open API and leveraging code generation for API endpoints to speed up development
- Oversee and plan migration and safe rollout of new versions of existing API endpoints
- Drive technical design for projects features within the API and integrations domain

Senior Software Development Engineer

Dec 2021 - Mar 2025

- Led development of the next-gen Public API platform, improving build/deployment times by 70% from hours to minutes and enabling faster iteration
- Co-developed a modern OAuth2 authorization server supporting OAuth2 code and client credentials flows
- Led the adoption of Open Telemetry for microservices and lambda functions which helped improve API response times and bottlenecks

- Migrated critical integration features from a monolith to isolated microservices, improving reliability and delivery speed
- Built and enhanced integrations for payment, transaction, and customer sync with external vendor APIs
- Improved the developer experience via Docker tooling, local dev environments, and internal scripts
- Collaborated with teams using feature flagging and staged rollouts to ensure safe, controlled delivery of backend changes

Fisher & Paykel Healthcare

Senior Software Engineer

May 2021 - Nov 2021

- Member of the IoT backend services team responsible for device data uploads and IoT infrastructure microservices
- Involved with and contributed towards the design of future system architecture and strategy
- · Contributed to future architecture strategy focused on containerization and scalable cloud patterns
- Set up Kubernetes/Docker usage standards and migrated services to container-based deployments
- Mentor junior members on best practices of software design and architecture
- · Worked closely with firmware teams to design reliable over-the-air update and device communication flows

Solutions Developer January 2018 — April 2021

- Built Platform libraries and internal tooling to improve engineering productivity
- Developed a CoAP protocol parser (UDP & TCP) and contributed to in-house IoT communication protocols
- Designed and developed microservices enabling next-gen over-the-air firmware solutions
- Co-developed a dynamic Protobuf serializer/deserializer library
- Contributed to mobile app development (React Native, iOS) including rewriting major user registration workflows
- Supported medical device design controls and ISO27001 requirements

Datacom

Software Developer (ASB Bank)

February 2015 - December 2017

- Designed and developed REST microservices for ASB's CRM platform, supporting home loan origination and customer onboarding
- Served as a lead developer and SME across multiple enterprise projects
- Delivered critical compliance and regulatory changes on time for Reserve Bank deadlines
- Built automation POCs using SpecFlow to improve testing efficiency
- Contributed to enterprise-scale upgrade projects for ASB's CRM system

Education

The University of Auckland (July 2011 - 2014)

Bachelor of Commerce (Information Systems and Management)

Interests

Technology Distributed Systems Engineering Craft Music Reading Sports & Fitness Business Finance

Referees

Available upon request.