

Ong Jun Xiong

AI Infrastructure & Backend Engineer

Singapore | junxiongong2@gmail.com | junxiong.dev | github.com/ong6 | linkedin.com/in/junx6

Profile

I build production agent runtimes, tool servers, and backend platforms. At TikTok, my work spans the shared AI layer and the Go services beneath global e-commerce operations. I also founded and sold a one-person AI company.

Experience

TikTok, Global E-commerce

Singapore | Apr 2024 – Present

AI Infrastructure Engineer, Promotion & Operations

Oct 2025 – Present

- Built the team's shared AI platform from zero: a LangGraph agent service on Google's A2A protocol, a Go MCP server exposing 16 analysis tools over the data warehouse, and a React SDK that adds streaming AI chat to a page in about five lines.
- Adding LLM analysis to a new surface went from a multi-file change to a single config directory, and analysis latency dropped from minutes to seconds. In daily use by operators and analysts across the team.
- Built the Marketing Strategy Center with operations teams across the US, Southeast Asia, and the UK: a Go/gRPC service and React console enforcing product eligibility and budget stop-loss continuously, replacing a daily manual review.
- Shipped the Promotion Data Center analytics backend in Go with Kafka, Redis and Hive-backed OLAP: 26 statistics across 8 drill-down dimensions on 4 endpoints, serving ~13 markets with real-time alerting.

Software Engineer, Seller Center & Creator Marketplace

Apr 2024 – Oct 2025

- Refactored hardcoded region logic so EU and future markets launch by configuration, and delivered the related compliance, data-pipeline and API migrations.
- Built the Video Diagnosis 2.0 recommendation backend in Go (candidate generation plus personalised ranking for creator-product matching), validated through A/B tests before rollout.
- Supported five owned and two contributed Go/gRPC services on the seller platform, handled 20+ on-call escalations, and added cache observability and alerting that stopped a recurring class of outages.

Compoze

Singapore | Jan 2025 – Dec 2025

Founder

Built alongside TikTok

- Built and ran a one-person AI solutions company: discovery, scoping, pricing, delivery, and client training.
- Shipped retrieval-augmented chat products with LlamaIndex, FastAPI, Next.js, and LlamaCloud. A client acquired the company at the end of 2025.

Earlier experience

Binance | *Software Engineering Intern, Payments & Cards*

Aug – Nov 2023

TypeScript and React UI, including the Crypto Box group-payment checkout flow.

Thought Machine | *Forward Deployment Engineer (Intern)*

May – Aug 2023

Python remediation tool over the Vault REST API, removing 20+ hrs/week of client-configuration work.

Tanso, Munich | *Full-stack Engineering Intern*

Jul – Dec 2022

Next.js, tRPC and PostgreSQL carbon-accounting dashboard; page load from 5s to under 50ms.

DBS Bank | *Backend Engineering Intern*

May – Jul 2022

Java and Spring Boot services for 1,000+ daily B2B users.

Skills

AI systems: MCP, A2A, LangGraph, LlamaIndex, RAG, agentic workflows

Backend: Go, TypeScript, Python, Java, gRPC, REST, Kafka, Redis

Data and infrastructure: MySQL, PostgreSQL, ClickHouse, Hive, Docker, Kubernetes, AWS

Product: React, Next.js, distributed systems, client delivery, technical scoping

Education

National University of Singapore

Singapore | Aug 2020 – Dec 2023

Bachelor of Computing (Honours), Computer Science

AI and Software Engineering

- NUS Overseas Colleges in Munich, SToW Award. President of the NUS Fintech Society (230 members).