Gabriel Ong Zhe Mian

gabrielongzm.com
Full-Stack Developer specialising in Legal Technology

+65-8123-9863
gabrielzmong@gmail.com
linkedin.com/in/gabriel-zmong
github.com/gongahkia

EDUCATION

Singapore Management University Aug. 2023 - May 2027
BSc Computing and Law, Cybersecurity (2nd Major) GPA: 3.60/4.00

Anglo-Chinese School (Independent) Jan. 2019 - Nov. 2020
International Baccalaureate Diploma Programme Points: 44/45

SKILLS

Frontend: React, Next.js, React Native, Flutter, Electron.js
Backend: Python, TypeScript, Go, Rust, SQL, Java, Node.js
Cloud: GCP, AWS, Docker, Kubernetes, GitHub Actions, Supabase, MongoDB, Pinecone, Cloudflare
Legal: Intellectual Property Law, Privacy & Data Protection Law, Company Law, Contract Law

EXPERIENCE

WhyHow.AI, San Francisco: *Software Development Intern* Aug. 2025 - Dec. 2025

- Architected a multi-agent ETL pipeline using **Python** and **Pydantic AI** to detect emergent harms across **10,000+** PubMed abstracts, reducing manual review time by an estimated **60%**.

Custom Automated Systems, Singapore: *Full-Stack Development Intern* May 2025 - Aug. 2025

- Implemented RAG and Agentic Refinement on ProQuaere's Outputs with **TypeScript** and **Hugging Face** models.
- Optimised client-side LLM inference for ProQuaere using **WebGPU** and **Electron.js**, achieving a **40%** reduction in average response latency.

SMU Yong Pung How School of Law, Singapore: *Research Assistant* Jan. 2025 - Aug. 2025

- Built a **15-agent large** Adversarial AI agent network in **Pydantic AI** and **ChromaDB** for use in ongoing academic publication research.

Elefant, Singapore: *Backend Development Intern* Sep. 2024 - Dec. 2024

- Engineered **CI/CD** pipelines in **Python** and **GCP** that automated end-to-end data extraction, enrichment, and validation workflows, reducing manual data processing effort by **65%** and improving data reliability.

PROJECTS

Yuho: Domain-specific language (DSL) in **Rust** that provides a formal, programmatic representation of Singapore's Penal Code, enabling automated legal reasoning and statute querying across **50+ criminal offences**.
Sea Kayak: Full-stack **React** and **Node.js** web application that aggregates and curates real-time legal news from **10+ Singapore sources**.
Jikai: Tort law hypothetical generation pipeline in **Python** and **LangChain**, enabling law students and researchers to create legal scenarios for academic study with an average generation latency of **3 seconds** per scenario.

AWARDS & COMPETITIONS

SMU Global Impact Scholarship Award Aug. 2023 - May 2027
Premier flagship scholars' award

SMU LIT Hackathon 2025 Sep. 2025
1st Place (MinLaw Track 2)

NUS Product Club Vibe-Building Hackathon 2025 Aug. 2025
2nd Place

HackOMania 2025 Feb. 2025
GeeksHacking Choice Award

YouthTechSG YouthxHack 2024 Aug. 2024
1st Place (Digital Defence Track)