PETER FUNG

peterjosephfung.com
+65 93215033 | peterjosephfung@gmail.com | linkedin.com/in/peterjosephfung | github.com/fungusta

EDUCATION

National University of Singapore
Aug 2021 - Jun 2025
Bachelor of Computing (Honors) in Computer Science (GPA: 4.16/5.0)
Specializations in Software Engineering and Cybersecurity

WORK EXPERIENCE

NCS, *Software Engineer*
Sep 2025 - Present

- Engineered Python FastAPI backend services and LLM orchestration pipelines for an internal AI productivity platform (NCSgpt) used by 1000+ employees.
- Integrated ChatGPT-5.2 and Claude Sonnet 4.5 using OpenAI and Anthropic SDKs, implementing streaming response parsing for smooth, real-time UI rendering.
- Led the end-to-end integration of 2 external AI agents (Napkin AI and Harvey AI) into the NCSgpt platform, designing the integration architecture, handling API orchestration, and ensuring seamless user-facing interactions within the existing AI workflow.
- Built an end-to-end FastAPI service for AI-driven PowerPoint generation, spawning Dockerized Python sub-agents with isolated execution environments and tool access to dynamically construct, modify, and validate NCS template-specific presentations via visual fidelity checks

Ryde, *Frontend Engineer Intern*
Jan 2025 - Jun 2025

- Built and owned the frontend of Ryde's WeChat Mini Program from the ground up using WXML, WXSS, and JavaScript, serving as the sole frontend developer across all UI components and user flows.
- Developed a secure one-on-one chat platform, implementing real-time messaging with WebSockets, including delivery status indicators (sent, delivered, read) and push notifications for reliability.
- Integrated in-app calling functionality via WebView, handling end-to-end call states such as call initiation, callee joined, and call termination.
- Improved chat history load performance by implementing lazy-loading pagination, reducing initial page load time by ~60% and maintaining smooth scrolling responsiveness for conversations exceeding 500 messages.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, Java, C#, Dart, HTML, CSS
LLM & AI: Open AI SDK, ANthropic SDK, Langfuse
Backend & APIs: FastAPI, RESTful APIs, WebSocket APIs
Frontend & Mobile: React, Flutter, Tailwind CSS, WeChat Mini Programs
Cloud & Infrastructure: Microsoft Azure, Azure Kubernetes Service (AKS), Docker, Terraform
Databases: PostgreSQL, MySQL

PROJECTS

PayMeLah, *Group Bill Splitting Application*

- Developed a full-stack bill splitting app using React Native + FastAPI, enabling real-time collaborative expense tracking.
- Built an OCR + AI pipeline to extract structured data from receipts, reducing manual input time by >90%.
- Implemented itemized cost assignment and automated bill splitting logic, improving accuracy and user experience.

HomeCooked, *AI-Powered Recipe Creation Application*
https://home-cooked-gamma.vercel.app/

- Built a React app + Next.js for structured recipe management and website scraping and parsing.
- Integrated OpenAI API to parse unstructured web and Instagram content into structured recipe data, reducing manual entry time from ~10 minutes to <30 seconds.