

KEE SONG YANG

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EDUCATION

National University of Singapore (NUS)

Aug 2022 - Present

Bachelor of Computing (Computer Science), Honours

- Final Year Computer Science Major with specialisation in Networking and Distributed Systems
- Relevant Coursework: Software Engineering, AI & ML, Database Systems, Information Security

University of Colorado, Boulder

Aug 2024 - Dec 2024

Student Exchange Programme, Fall 2024, Computer Science

- GPA: 3.75/4 — Relevant Coursework: Operating Systems, Algorithms, Network Systems

WORK EXPERIENCE

Voltade (Singapore), Software Engineer Intern (On-site)

Jan 2025 - June 2025

- Launched an AI curriculum planner by **leading weekly customer meetings** and conducting demos. Iterated by gathering user feedback and resolving production issues.
- Developed a video-to-report tool using **FFmpeg** to scale and extract frames, and OpenAI's GPT to identify students, reducing teachers' time spent per report by 75%
- Developed an admin portal to manage classes, lessons and learning objectives using **React.js** with **TanStack**. Designed flexible schemas in **Drizzle ORM** to adapt to changing requirements and created REST APIs with **Hono.js** and **Supabase** with **PostgreSQL** for effective data retrieval
- Successfully migrated customers across platforms by creating scheduled **CRON** jobs with **TypeScript** to extract data from external sources, ensuring data consistency through idempotency
- Learnt **Vue.js** with **Ruby on Rails** from scratch to launch a WhatsApp broadcast feature for CRM app within 2 weeks
- Created an online VS Code editor by spinning up a **Kubernetes** pod on demand and connecting via VS Code protocol. Displayed apps using **microfrontend**

Podsmart AI (United States), Software Engineer Intern (Remote)

May 2024 - Aug 2024

- Created an episode page with an integrated audio player from scratch, utilising **Next.js** with Shadcn UI
- Developed a monthly user usage tracking system to accurately track monthly subscription limits using **FastAPI**, **Supabase** with **PostgreSQL**
- Identified and promptly resolved authorisation security issues in the frontend and backend
- Optimised API performance for episode page by adding index to SQL query, reducing latency by 60%

NUS Computing (Singapore), Teaching Assistant

Jan 2023 - Jun 2023

- Collaborated closely with Prof. Tan Tiow Seng and fellow teaching assistants to develop examination grading scheme to effectively assess students' understanding of **programming methodology concepts** in the CS1010X course
- Taught the following topics with strong mastery in **Python** and **Java**: Functional Abstraction, Recursion, Orders of Growth, Data Abstraction, OOP, Dynamic Programming
- Displayed strong mentoring abilities by providing individualised guidance to a group of 7 students, based on unique learning styles and skill levels

PROJECTS

TypeDash ([Repo](#) | [Link](#)), Backend Developer

May 2023 - Aug 2023

- A type racing website with multiplayer features and customisable loadouts and statistics
- Utilised **Express.js** and **Prisma ORM** to implement REST APIs, Passport.js for authentication middleware
- Leverage **Socket.IO** for real-time updates; display race results and live leaderboard changes to users

TECHNICAL SKILLS

Programming Languages: Python, C, Java, Typescript, SQL

Frontend: React.js, Next.js, TanStack, Tailwind CSS

Backend: Node.js, Express, Hono, FastAPI, Socket.IO, Firebase, Supabase, NumPy, Pydantic

Technologies: Linux, Bash scripting, Docker, LLMs, ngrok