KEE SONG YANG

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EDUCATION

National University of Singapore (NUS)

Expected May 2026

Bachelor of Computing (Computer Science), Honours

- Relevant Coursework: Software Engineering, Object-Oriented Programming, Database Systems, Information Security, Network Systems, Operating Systems, Data Structures & Algorithms, AI & ML
- Teaching Assistant: CS1010X Programming Methodology Python and Java

WORK EXPERIENCE

Ola Chat (Singapore), Software Engineer Intern

Jul 2025 - Present

- Built interactive **React**-based mini-games using **WebView**, ensuring cross-platform compatibility on Android and iOS; improve user experience with lazy loading and **TanStack Query** caching, incorporating UX design principles to enhance functionality
- Migrated CI/CD to a two-step flow self-hosted GitHub runner builds changed subprojects and uploads artifacts, followed by webhook-triggered Aliyun Flow deployment, shifting build workload off deployment server for cleaner separation of concerns
- Deployed responsive multi-brand static sites with **Vite**; automated CI builds with domain-specific assets and streamlined artifact deployment to **Aliyun ECS**, simplifying **nginx** setup across 3 domains and ensuring scalability and maintainability

Voltade (Singapore), Software Engineer Intern

Jan 2025 - Jun 2025

- Led end-to-end design of an AI curriculum planner adopted across 28 preschool branches engaging in iterative development through weekly stakeholder meetings, live demos & continuous user feedback loops
- Automated data migration across platforms by building an **ETL**-style pipeline using **Graphile Worker** cron jobs to extract data from external sources, transform WhatsApp message data and load into **PostgreSQL**, ensuring idempotency across 20000+ records
- Resolved a Supabase Auth production bug affecting Outlook users by analysing server logs and identifying email prefetching behaviour that caused magic links to expire
- Developed a video-to-report tool using **React** with **TanStack**, **FFmpeg** to scale and extract frames, and **OpenAI GPT** tool calls to identify students, reducing teachers' time spent per report by 75%
- Learnt **Vue** and **Ruby on Rails** from scratch within 2 weeks to launch a broadcast feature with metrics tracking leveraging WhatsApp Cloud API to send messages to 500+ customers per campaign

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

May 2024 - Aug 2024

- Developed an intuitive audio player in **React** with a mobile-responsive design, enhancing user experience through features like progress bar markers for key topics, synchronised playback with transcript timestamps, and direct navigation to identified entities
- Devised a usage tracking schema using **FastAPI**, **Supabase** with **PostgreSQL** to enforce user monthly podcast summarisation limits, eliminating a loophole that allowed unlimited access to transcribed episodes
- Resolved a critical authorisation flaw by implementing **role-based access control** middleware using **JWT**, preventing free-tier users from accessing premium features
- Optimised API performance for episode page by adding composite index to SQL table, sped up page loading by 60%

PROJECTS

TypeDash V2 (Repo | Link)

Jul 2025 - Present

- Developed a real-time type-racing game using **React** and **WebSockets** (migrated from **Socket.IO**), leveraging **Redis** for centralised game state management and **Redis Pub/Sub** to broadcast typing progress to users within multiplayer rooms
- Migrating backend from Express.js to Golang for better concurrency support; implementing a **Redis**-powered leaderboard system for real-time ranking updates

Exportifellas (Repo | Link)

• Ideated a plaintext playlist extraction feature using the **Spotify API** in an open-source fork, deployed for internal use in NUS Raffles Hall to streamline song voting process for all performances

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, SQL, Python, C, Java

Frameworks: React.js, TanStack, Tailwind CSS, Hono.js, FastAPI, Socket.IO, Firebase, Supabase, Drizzle ORM

Technologies: Linux, Bash scripting, LLMs, CI/CD