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 and 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
- Built interactive **React**-based mini-games for **WebView** and **gRPC** integration within a Flutter app; applied lazy loading, image optimization and **TanStack Query** caching to enhance load speed and user experience
- Migrated CI/CD pipeline to GitHub Actions, offloading builds from the deployment server to maintain separation of concerns; enabled subfolder-based triggers, artifact uploads, and Aliyun Flow deployment with Slack notifications

Voltade (Singapore), Software Engineer Intern

Jan 2025 - Jun 2025

- Led the end-to-end design and launch of an AI curriculum planner adopted by 200 users across 28 preschool branches by running weekly customer meetings, live demos, and continuous feedback loops
- Resolved a **Supabase Auth** production bug affecting Outlook users by analyzing server logs and identifying email prefetching behavior that expired magic links; replaced magic link login with OTP-only flow after assessing auth limitations and user feedback
- Developed a video-to-report tool using **React** with **TanStack**, **FFmpeg** to scale and extract frames, and **OpenAl GPT** tool calls to identify students, reducing teachers' time spent per report by 75%
- Automated data migration across platforms by building an ETL 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
- Learnt **Vue** and **Ruby on Rails' MVC architecture** from scratch within 2 weeks to launch a WhatsApp broadcast feature with metrics tracking using **Redis-backed Sidekiq workers** and WhatsApp Cloud API, sending messages to 500+ customers per campaign

<u>Podsmart AI</u> (United States), Software Engineer Intern (Remote)

May 2024 - Aug 2024

- Built an intuitive audio player in **React** in a mobile responsive layout, enabling UX through progress bar markers for key topics, synchronized playback with transcript timestamps, and direct audio jumps to identified entities
- Devised a usage tracking schema using **FastAPI**, **Supabase** with **PostgreSQL** to precisely track and enforce user monthly podcast summarisation limits, eliminating a loophole that allowed unlimited access to transcribed episodes
- Resolved a critical authorization 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, which 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 centralized 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)

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

TECHNICAL SKILLS

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

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

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