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** and PNPM; 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 runtime performance
- Implemented a pre-push shell script to run build on changed subfolders in a monorepo, catching build errors before deployment

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 **OpenAI 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 in TypeScript to extract data from external sources, transform data through validation and cleaning steps and load into **PostgreSQL** database, ensuring idempotency across 20000+ records
- Learnt **Vue** and **Ruby on Rails' MVC architecture** from scratch within 2 weeks to launch a WhatsApp campaign automation using ActionCable, **Redis-backed Sidekiq workers** and WhatsApp Cloud API, enabling real-time CRM messaging to 500+ clients with delivery metrics tracking

Podsmart AI (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