Roger Zhang

✉ rogerzhangxh@gmail.com   📞 +65 86522908   **in** Roger Zhang

EDUCATION

National University of Singapore   Aug 2025 – Jul 2029
Bachelor of Computing, Computer Science
- GPA: 5.00/5.00
- NUS Merit Scholarship recipient

Raffles Institution   Jan 2017 – Dec 2022
GCE A Levels, 7 Distinctions
- Raffles Academy: Mathematics, Physics, Chemistry

EXPERIENCE

Hypotenuse AI 🔗   Singapore
Growth and Operations   Jan 2025 – Jun 2025
- Spearheaded inbound and outbound sales, CRM, lead qualification and high-profile outreach.
- Managed recruitment for multiple roles, screening thousands of candidates and scheduling weekly interviews.
- Boosted productivity of data workflows through automation with Python scripts and Pandas.

Singapore Physics League 🔗   Singapore
Deputy Chief Organiser, Problem Setter   Sep 2022 – Jun 2025
- Led an 18-member team to host the 4th Singapore Physics League with 3000 participants from 109 schools.
- Set and reviewed problems for 3 editions of SPhL which were warmly received by participants.

PROJECTS

TikTok TechJam [GitHub 🔗]   Aug 2025
- Backend engineer for **GeoFlag**, a private LLM-powered compliance dashboard for region-specific feature validation.
- Designed a vectorization and retrieval pipeline, converting laws and regulations into embeddings and storing them in Supabase for semantic search.
- Implemented API routing in Next.js and LLM inference via Ollama to generate compliance checks grounded in retrieved regulations.

National AI Student Challenge, 1st Place [GitHub 🔗]   May 2025
- Led system architecture and full-stack development for **CivicAId**, a conversational assistant for reporting and routing municipal issues to the appropriate agencies.
- Developed RESTful APIs using Node.js (Express) with PostgreSQL (NeonDB) queries to support end-to-end application flow.
- Built the frontend in React (Vite) and Tailwind (DaisyUI) to deliver a responsive, user-friendly interface.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, HTML, SQL, Python

Frameworks & Libraries: React (Vite, Next.js), Node.js (Express), Tailwind CSS

Databases & Platforms: PostgreSQL (NeonDB, Supabase)

Others: Git, NumPy, Pandas, LaTeX