

ZhengHao Fang

📍 Singapore 📞 +65 9354 0924 ✉ zhfang03@gmail.com
🌐 <https://bit.ly/githubdarzizalol> 📄 <https://bit.ly/zhenghao> 🔗 <https://bit.ly/leetcodezh>

EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE (NUS)

Aug 2024 – May 2028

Bachelor of Computer Science

- Sophomore student
- Current Focus Areas: Database, Software Engineering, Algorithm
- Won at NUS Industrial Systems Engineering (ISE) Business Analytics Case Competition 2023

EXPERIENCE

Invigilo AI

Jan 2026 – Apr 2026

Software Engineer Intern

- Build full-stack analytics dashboards utilizing Vue.js for frontend visualization
- Develop real-time mobile features via Flutter, implementing MQTT protocols for efficient message brokering.
- Manage database versioning and software reliability using Alembic and Pytest in a CI/CD-adjacent environment.
- Configure Docker-based microservices, troubleshooting networking to ensure stable, reproducible development environments.

NUS School of Computing

Aug 2025 – Apr 2026

Laboratory Teaching Assistant – CS2100 Computer Organization

- Conducts weekly classes for undergraduate (2 semesters and still counting)
- Teaching score: 4.5/5.0 (faculty average: 4.3/5.0)
- Instruct students on C programming fundamentals and practical memory debugging using GDB.
- Guide the debugging of MIPS assembly code and CPU register management using the QTSpim simulator.
- Facilitate hands-on digital logic labs using physical Logic Trainers and Logisim software

NUS Hackers

Feb 2024 – Current

Coreteam Member

- Organized Hack&Roll 2025 and 2026, Singapore's largest student-led hackathon, scaling the event for 800+ participants.
- Plan and facilitate recurring technical talks and developer workshops.
- Led a live workshop on React, delivering both my practical insights and knowledge to 200 students through live coding sessions.

PROJECTS

BetterBetterHelp

- **Agentic AI Therapist:** A personality-driven therapist that offers hilariously sarcastic advices to anyone in distress.
- **Frontend:** Developed frontend with the use of React, TailwindCSS, and Zustand for state management.
- **Agentic features:** Created Agentic audio transcription with ElevenLabs, and incorporated LLM interactions with Open AI.
- Built during Cursor Hackathon Singapore 2025: <https://github.com/Abhijay25/BetterBetterHelp>

InkFlow

- **Note-taking desktop application:** Developed a desktop application utilizing Electron and React, focusing on a responsive user experience and offline-first functionality with SQLite.
- **AI-driven features:** utilizing Whisper and AssemblyAI to transform audio input into structured digital notes.
- **Full-stack development:** Collaborated on end-to-end feature delivery, from designing intuitive TypeScript interfaces to managing complex relational database schemas.
- **Qualitative Assessment:** Optimized development workflows by establishing CI/CD practices, reducing manual deployment overhead and improving code reliability.
- **Achievement:** Apollo 11 (2nd tier award under NUS Orbal program).
- Github repository: <https://github.com/Abhijay25/Orbital-InkFlow>
- Certification: <https://credentials.nus.edu.sg/5e2bad04-8dc3-4dc0-ae1c-67d91eb62c68#acc.HhZnpKSG>

SKILLS AND OTHER INFORMATION

Languages: English (Native) and Mandarin (Native)

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

Framework: Spark, Flink, React, Material UI, TailwindCSS, Electron.js, PostgreSQL, RESTful APIs, Docker, pytest, Playwright, Vue.js, Flutter, Alembic,