Chang Si Kai

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GitHub · LinkedIn · Personal website

EDUCATION

National University of Singapore, Singapore, *Penultimate year undergraduate*   **Aug 2021 – May 2025**
- Bachelor of Computing in Computer Science (Honors), *Graduating in May 2025*
- Grade Point Average (GPA): 4.71/5.00 (Highest Distinction)

LANGUAGE and SKILLS

Languages: Java · Python · JavaScript · HTML · CSS · SQL · C · Markdown
Libraries and Tools: Git · React · Flask · PostgreSQL · MongoDB · Next.js · Tailwind CSS · Node.js · Express · EC2

EXPERIENCE

Factorem, *Full Stack Developer Intern*   **Aug 2023 - Present**

Shanghai Pudong Development Bank, *Artificial Intelligence Intern*   **May 2023 – Aug 2023**
- Wrote reusable and flexible script to help reduce the time spent by the team and attention needed to research and finetuning of hyperparameters on machine learning models.
- Increased overall quality score of synthetic data generated through research and finetuning of models and hyperparameters from a baseline score of 64% to 88%.
- Led efforts in designing and developing front-end abstraction in React for software prototype leveraging on LLM.

National University of Singapore, *Undergraduate Teaching Assistant*   **Jan 2023 – Present**
- Modules taught: CS2030S (Programming Methodology II), CS2103T (Software Engineering)
- Obtained average feedback score of 4.5/5.0, greater than the average of 4.2/5.0 in the school.

PROJECTS and OPEN SOURCE

RepoSense (GitHub): *NUS-OSS project, Open-source contribution analysis tool for Git repositories, Main developer team*
- Notable PRs and Issues: #1857, #1875, #1900, #1961

singaScript (Link) (GitHub): *Singlish-flavored Esolang and gamified development environment*
- Implemented asynchronous programming on APIs, improving scalability.
- Worked closely in a team of 3, learning unfamiliar languages and frameworks under time pressure.

MyInsuRec (GitHub) (Contributions): *Scheduling and organizing solutions for insurance agents*
- Led team meetings for discussions, set agendas and deadlines, resulting in all deliverables completed on time for each iteration with little/minor bugs.
- Led efforts for comprehensible documentation for both users and future developers.
- Advocated for more and sensible unit testing, resulting in less bugs overall and increased code coverage score.

WhereGotTime(table)? (Link) (GitHub): *Generate and optimize for students school timetable through genetic algorithms*
- Researched and analyzed tools best suited for the team based on complexity and time/effort required.
- Implemented parser to parse and clean data pulled from NUSMods API into a more suitable format for use.

AWARDS and EXTRA CURRICULAR ACTIVITIES

HackNRoll 2023 – Most Beautiful Hack (Devpost)   **Jan. 2023**
Science and Technology Club, Swiss Cottage Secondary School – Head of Programming   **Jan. 2015 – May. 2016**

MISC

- Attained the rank of Third Sergeant in the **Singapore Armed Forces**: Completed two years of mandatory national service. Received NS Excellence award in 2023 for outstanding performance during call-up.
- Singaporean Citizen; Eligible for the H-1B1-Singapore visa, which has a separate quota from the limited H-1B pool.