FREDDY CHEN YOU REN

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EDUCATION

National University of Singapore (NUS)   **Aug 2022 - Present**
Bachelor of Computing (Honours) in Computer Science, 2nd Major in Management.
- Expected Date of Graduation: May/June 2026. GPA: 4.35/5.00

Hwa Chong Institution (HCI)   **Jan 2020 - Dec 2021**
Singapore-Cambridge GCE Advanced Level (Science Stream)
- Awarded HC Outstanding Student Award and HC Diploma in Distinction. GCE 'A' Level Rank Point: 90.

TECHNICAL SKILLS

- **Technologies & Languages:** Java, JavaScript, TypeScript, Python, HTML5, SCSS, CSS3, Material UI, ReactJS, React Native, Node.js, Express, Firebase, MongoDB, NumPy, Pandas.
- **Tools & Frameworks**: Docker, Git, GitHub, SourceTree, Vim, Markdown, JUnit, JMeter, Jest, Expo Mobile.
- **General:** Agile Methodology, Microservice, UI/UX Design, CI/CD, State Management, REST APIs, Software Testing (Unit, Integration, Performance, UAT).
- **Relevant Courses:** Data Structures and Algorithms, Software Engineering Principles and Patterns, Software Testing, Computer Networks, Operating Systems, Computer Security, AI/Machine Learning.

WORK EXPERIENCE

Sparky Animation   **May 2024 - Aug 2024**
Software Developer Intern – JavaScript, HTML5, CSS3, Python
- Redesigned 12 major pages of the internal web app responsible for the animation pipeline of Sparky Animation, enhancing the UI and intuitiveness of the web app for smoother UX.
- Refactored codebase, focusing on code readability, maintainability, and Separation of Concerns.
- Received positive feedback in manual user testing for artist users and the main developer team.

Asindo Karya (Indonesia)   **Nov 2020 - Present**
Freelance Purchasing (Remote)
- Sourced mostly marine supplies and safety equipment requested by clients at competitive prices from regional suppliers like Singapore, Japan, and South Korea, receiving at least 5 sets of orders monthly.
- Researched and analysed economic activities to short-list potential suppliers and tailor negotiation discussions to generate at least 10 to 15% profitability and up to 40% cost reduction.
- Coordinated with Singapore and Indonesia export and import forwarders to ensure timely delivery of clients' goods, usually within 1 week after order confirmation.

FEATURED PROJECTS

Project Peerprep – CS3219 Software Engineering Principles and Patterns   **Aug 2024 - Nov 2024**
Software Engineer – React JS, TypeScript, CSS, Material UI, MongoDB, Gemini API
- Collaborated with a team of 5 to develop a role-based Single-Page Application (SPA) for real-time peer programming activity using Microservice and Event-based architecture.
- Facilitated and monitored the overall project direction, with weekly checkpoints and work evaluation.
- Integrated basic Gemini API and tailored it to assist users in their peer programming tasks.

Luminous Zephyr – TikTok TechJam 2024 Hackathon   **Jul 2024**
Frontend Developer – React TS, SCSS, Material UI
- Collaborated with a team of 4 to develop an AI Prompt E-commerce app for TikTok Shops.
- Implemented front-end minimalistic designs of product cards and product filters.
- Ideated and produced the video demonstration of Luminous Zephyr.

Project NUShopLah! – Independent Software Engineering Project   **May 2023 - Sep 2023**
Full Stack Software Engineer – React Native, Firebase, Jest, Expo Mobile
- Implemented a buyer-seller reward system mobile application in a 2-man project within 2 months.
- Awarded 'Advanced' level of achievement for practicing Agile software development principles.
- Integrated frontend React Native with backend Google Firebase Firestore and Storage.
- Documented software development methodologies in a 120-page document for future developers.

LEADERSHIP AND COMMUNITY INVOLVEMENT
Community Activities for Seniors with SG Cares – Kwong Wai Shiu @McNair   **Mar 2025 - Present**
Meeting and Proposal Officer
- Facilitate team meetings to ensure timely management of activity planning and preparation.
- Validate activity proposals' feasibility and alignment with the needs and desires of beneficiaries.
- Implement weekly communal activities for seniors, focusing on vibrancy, empathy and lifelong learning.

NUS Chinese Orchestra (NUSCO)
Student Leader in Arts and Principal Player (Percussion)   **Dec 2022 - Present**
- Facilitated events for NUSCO and Centre For the Arts (CFA) missions, such as the Freshman Orientation Programme and WBAS Youth Band Festival Workshop.
- Managed production and logistics of concerts, including audio effects, stage plans, artistic presentation of concert and audience engagement.
- Coordinated regular practices with professional tutors to enhance musical standards of members.

CS4218 Software Testing – Teaching Assistant   **Aug 2025 - Present**
- Expected to assist in project grading, provide assistance to students and invigilating course exams.

OVERSEAS EXPERIENCE
Zhengzhou University – Zhengzhou, China   **Jul 2025 - Aug 2025**
Singapore Youths Summer Camp on Central China Culture 2025
- Gained appreciation of Chinese Central Plains culture, its development and changes of modern China through learning Chinese history, language, and cultural trips.

Huazhong University of Science and Technology – Wuhan, China   **Jun 2025 - Jul 2025**
International Summer School 2025
- Completed "Discover at HUST – 'Metaverse' International Summer School" at the School of Electronic Communication and Information with Full Chinese Government Scholarship.

Università Cattolica del Sacro Cuore – Milan, Italy   **Dec 2024**
Winter Exchange Program 2024
- Completed Marketing & Communication course CM/MK331 "Understanding the customer: theories, trends, and values for an effective communication strategy". Overall score: 29/30.

Hanyang University – Seoul, South Korea   **Dec 2023 - Jan 2024**
Hanyang International Winter School, Foreign Exchange Program 2023
- Completed Basic Korean (Level 1) Course. Achieved Grade and GPA: A0, 4.00/4.5 (95%)

AWARDS & CERTIFICATES
- "NUS Orbital - Apollo 11 (Advanced)" Software Development Certificate - 2023.
- "Hwa Chong Outstanding Student Award" and "Hwa Chong Diploma Distinction" for 2021 graduating batch.
- Certificate of Distinction, Singapore Youth Festival 2021, Hwa Chong Symphonic Band.
- Honourable Mention in Singapore Mathematics Olympiad 2020 and Singapore Physics League 2021.

ADDITIONAL INFORMATION
- Language: English (Native), Chinese (Native), Bahasa Indonesia (Native), German (Elementary).
- Interests: Strategic thinking, Technopreneurship, Software Engineering, Artificial Intelligence, Computer Security, Business, Environment, Global Citizenship, Music, Trains, General Science.