

HENG YEE CHONG, FABIAN

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Education

Aug 2023 – Present

National University of Singapore (NUS) • Bachelor of Computing in Computer Science • Singapore

- *President* of NUS Korean Cultural Interest Group
- *Programmes Committee* of NUS SOC Freshmen Social Camp
- *Volunteer Management Committee* of NUS Project Action Speaks Louder

Apr 2018 – Mar 2021

Singapore Polytechnic (SP) • Diploma in Infocomm Security Management • Singapore

- *Programmes Committee* of SP Sign Language Club
- *Student Ambassador* of SP School of Computing Club
- *Volunteer* of SP Overseas Learning Express (in Yogyakarta)

Jan 2014 – Nov 2017

School of Science and Technology (SST) • Singapore

- *Sub-committee* of SST Student EXCO Club
- *Talent* of SST Inc, Talent Development Program
- *Member* of the SST Floorball Club

Experience

Aug 2023 – Jul 2024

Full-Time • Technical Manager • Ultraflow Engineering Private Limited, Singapore

- Supervised engineering projects, including overseeing the completion of AutoCAD drawings and tabulating parts for accurate project execution.
- Optimized the company's network configuration by resolving technical issues and maintaining stable operations of Wi-Fi, network connectivity, and internal file management systems.
- Redesigned and modernized a fully responsive company website to enhance user experience.
- Managed the invoice and quotation file systems to ensure accurate and timely financial processing.

Sep 2021 – Jul 2023

Full-Time • Signal Support System Specialist • MINDEF, Singapore Armed Forces, Singapore

- Gained advanced networking and cybersecurity skills as a Signal Specialist.
- Developed expertise in managing personnel effectively.
- Acquired experience in financial administration processes.

Apr 2021 – Aug 2021

Part-Time • Administrative Assistant • Healthway Medical Group, Singapore

- Managed and maintained digital records for seniors and patients' vaccination data, ensuring accuracy and compliance with health regulations.
- Streamlined registration, tracking, and admission processes for vulnerable populations during the COVID-19 pandemic, utilizing data management tools to improve operational efficiency and supporting the development of digital solutions to enhance healthcare administration.
- Promoted efficiency by integrating database management and registration systems.
- Developed expertise in safeguarding seniors with severe vaccine reactions.

Mar 2020 – Aug 2020

Internship • Telco Software Engineer • Trustwave, Singapore Telecommunications Limited, Singapore

- Processed and analysed large-scale datasets to extract meaningful insights.
- Developed and optimized reusable Web Threat Dashboard components using React, ensuring efficient and scalable front-end solutions.
- Designed a visually appealing website, integrating live data into an intuitive and user-friendly dashboard.
- Customized and refined various widgets to meet specific client requirements and enhance user experience.
- Managed administrative tasks, coordinated meetings with fellow interns, and delivered presentations to highlight progress and achievements.

Projects

May 2024 – Aug 2024

Trackspence

NUS ORBITAL 2024 • TECH STACK: [TYPESCRIPT](#) | [JAVASCRIPT](#) | [HTML](#) | [CSS](#) | [MONGODB](#) | [GEMINI API](#) | [NETLIFY](#) | [DAVINCI RESOLVE](#)

- Developed Trackspence, an all-in-one expense tracking web application to categorize expenses, set budgets, and provide real-time updates on spending habits.
- Created a robust friend system that includes adding/removing friends, splitting bills, and sending notifications. Enabled multi-currency support through API integration.
- Implemented enhanced user authentication with email verification and encrypted data storage to ensure privacy protection.
- Designed tools for investment and budget management to track portfolios, monitor financial performance, and visualize budget progress.
- Utilized the MERN stack (MongoDB, Express.js, React.js, Node.js) for scalable development and integrated APIs (AlphaVantage, FXratesAPI, Gemini API, Mailgun) for real-time data and communication.
- Ensured cross-platform accessibility with a focus on intuitive design and comprehensive functionality across devices.

Jan 2024

Scissors, Paper, Showdown!

HACK & ROLL HACKATHON 2024 • TECH STACK: [JAVA](#)

- Developed a Java-based simulation of Scissors, Paper, Stone, featuring diverse bots with unique strategies for competitive play.
- Engineered each bot to leverage advanced tactics and strategies to gain an edge over opponents.
- Conducted over 100,000 simulated rounds to rigorously evaluate and identify the most effective strategies.
- Analysed results to determine optimal approaches and refine bot performance.
- Documented findings and insights to support strategic decision-making and enhance future bot designs.

Aug 2023 – Dec 2023

Ultraflow Engineering Website

TECHNICAL MANAGER, ULTRAFLow ENGINEERING • TECH STACK: [HTML](#) | [CSS](#) | [JAVASCRIPT](#) | [NETLIFY](#)

- Recreated a modern, responsive website showcasing the company's portfolio, significantly enhancing its online presence.
- Deployed the website using Netlify and GitHub's native hosting services for reliable and efficient performance.
- Improved the website's design, resulting in increased traffic, user retention, and overall productivity for the company.

Oct 2020 - Feb 2021

Digital Twinning & Automated Pentesting (DTAP)

SP FINAL YEAR PROJECT • TECH STACK: [PYTHON](#) | [POWERSHELL](#) | [PREMIER PRO](#) | [AMAZON WEB SERVICES](#)

- Designed and developed an automated tool to streamline the deployment of target machines to the cloud and facilitate remote penetration testing.

- Leveraged Amazon Web Services (AWS) to integrate digital twin machines with AWS Cloud servers, enabling off-site penetration testing capabilities.
- Engineered a script using Python and PowerShell to automate deployment and testing processes, ensuring efficiency and reliability.
- Conducted advanced visualization and documentation of testing results.
- Coordinated cloud infrastructure and remote access features to support comprehensive, on-demand security assessments.
- Achieved 2nd place in the school's AY2020/2021 Semester 2 FYP Showcase.

Nov 2020 - Feb 2021

FishMon

INTERNET OF THINGS • TECH STACK: [PYTHON](#) | [C++](#) | [HTML](#) | [JAVASCRIPT](#) | [FLASK](#) | [ARDUINO](#) | [AWS KINESIS](#) | [AWS SUMERIAN](#) | [PREMIER PRO](#)

- Engineered FishMon, a comprehensive electrical sensor tool designed to monitor and analyse the conditions of a fish tank.
- Integrated cameras, actuators, and sensors to collect real-time data, which is then presented through a user-friendly data dashboard.
- Developed features to display current tank status, water level, fish movement and species tracking, water pollution levels, and more.
- Utilized Amazon Web Services to host the web application, with Kinesis and Sumerian for enhanced functionality and data processing.

Mar 2020 - Aug 2020

Web Threat Dashboard

SOFTWARE ENGINEER, SINGTEL • TECH STACK: [REACTJS](#) | [SQL](#) | [FIGMA](#) | [MONGODB](#)

- Engaged in a dynamic project focused on extracting valuable insights from extensive datasets.
- Crafted efficient front-end components with React to build scalable and responsive user interfaces.
- Designed intuitive dashboards that seamlessly integrate live data for an enhanced user experience.
- Tailored features to meet specific client needs, optimizing functionality and user satisfaction.
- Handled project coordination, including organizing meetings and delivering key presentations to showcase progress and milestones.

Jan 2020 - Mar 2020

SP SHARE

MOBILE APPLICATIONS • TECH STACK: [JAVA](#) | [MYSQL](#) | [GOOGLE FIREBASE](#) | [ANDROID STUDIO](#)

- Developed a fully deployable Android application enabling users to share and manage personal notes on a collaborative platform.
- Implemented a backend database using Google Firebase to capture and store user-generated notes and images via form submissions.
- Incorporated a search feature to filter and retrieve notes based on keywords.
- Integrated location tracking and a customizable theme changer to enhance user experience and functionality.

June 2019 - Aug 2019

Game Robo

ENTERPRISE APPLICATION DEVELOPMENT • TECH STACK: [CSS](#) | [HTML](#) | [JAVASCRIPT](#) | [MYSQL](#)

- Developed a website simulating a game store using MySQL, JavaScript, and HTML.
- Engineered the backend with MySQL database tables to manage game data and interactions.
- Enabled users to add new game details and display them dynamically on the website through query input.

Mar 2019 - Apr 2019

Sparklz

WEB CLIENT DEVELOPMENT • TECH STACK: [CSS](#) | [HTML](#) | [JAVASCRIPT](#)

- Created a responsive website simulating an online store specializing in necklaces and earrings.
- Implemented a fully functional shopping cart and integrated backend support for payment processing and checkout.

Organizations

Aug 2023 – Present

President • Korean Cultural Interest Group

- Led and managed a CCA with over 300 active members, ensuring smooth execution of all club events and activities.
- Fostered strong skills in people management, task delegation, and financial management, including the proposal and processing of financial reimbursements.
- Drafted proposals and coordinated closely with vendors, suppliers, and club advisors to facilitate successful event planning and execution.
- Handled venue bookings, managed equipment maintenance, and ensured all logistical aspects were efficiently managed.
- Delivered a public speech to welcome new members to the club, demonstrating leadership and communication skills.
- Organized and hosted a variety of engaging events that catered to the interests of members, enhancing club participation and involvement.
- Took initiative to perform on stage, showcasing versatility and dedication to the club's activities.

Jan 2023 – Jul 2023

Volunteer Management Committee • NUS Project Action Speaks Louder

- Managed the recruitment and interview process for new volunteers, conducting interviews and assessing candidates for project suitability.
- Oversaw administrative tasks and database management, ensuring accurate and efficient documentation.
- Developed proposals and safety management plans, including comprehensive safety forms.
- Served as a Safety Manager, ensuring the well-being of participants during events and maintaining a safe environment.
- Organized and hosted events for the d/Deaf community, actively participating in workshops and activities to enhance communication skills and deepen understanding of d/Deaf culture.

Nov 2022 – Jun 2023

Programmes Committee • NUS SOC Freshmen Social Camp

- Drafted proposals for camp activities, including program flow, game selection, and point systems for scoring and awarding prizes.
- Ensured seamless execution of the program, overseeing the smooth operation of events.
- Took on the role of game master, managing time effectively to ensure the successful progression of multiple groups during station activities.

Apr 2019 – Mar 2021

Programmes Committee • SP Sign Language Club

- Organized and coordinated events and camps for club members, ensuring engaging and meaningful experiences.
- Outlined comprehensive operation plans, handling event logistics, objectives, and timelines to ensure seamless execution.

- Facilitated regular meetings for club members, fostering a collaborative environment and effective communication.
- Led interviews and selection processes for potential committee members, identifying and onboarding individuals who align with the club's mission and values.
- Coordinated and participated in community service initiatives, promoting social responsibility and community engagement among members.
- Instructed and taught members basic sign language, enhancing communication skills and fostering inclusivity within the club.

Apr 2018 – Apr 2020

Student Ambassador • SP School of Computing Club

- Facilitated Capture the Flag introduction games during the SP School of Computing Open House, engaging both students and parents in interactive learning experiences.
- Served as the Safety Officer, ensuring the well-being of all participants and maintaining a safe environment throughout the event.

Jan 2015 – Nov 2017

Sub-Committee • SST Student EXCO Club

- Served as a Student Counsellor, providing guidance and support to fellow students, fostering a positive and inclusive school environment.
- Acted as a Student Patrol Officer, actively ensuring the safety and well-being of students by monitoring school premises and addressing any safety concerns.

Honours & Certifications

Jan 2025

IWC20400 Principals of Accounting (A+)

ISSUED BY KOREA UNIVERSITY

Sep 2024

NUS CSC Colours Award 2024 (Merit)

ISSUED BY NUS COMMUNITY SERVICE CLUB

Aug 2024

NUS Orbital - Apollo 11 (Advanced)

ISSUED BY NUS SCHOOL OF COMPUTING

Mar 2022

Advanced Certificate in Infocomm Technology

ISSUED BY SIGNAL INSTITUTE (SAF)

Apr 2020

SP's CCA Gold with Honors

ISSUED BY SINGAPORE POLYTECHNIC

Mar 2020

Singtel Cyber Security Cadet Scholarship 2019

ISSUED BY SINGTEL

Nov 2019

Student Volunteer Recognition Programme 2019

ISSUED BY AISP

Sep 2019

Organizational Systems Security Analyst

ISSUED BY THINKSECURE

Mar 2019

Youth Cyber Exploration Program Facilitator

ISSUED BY SP SCHOOL OF COMPUTING