# 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
- On track to <u>First Class Honors</u>

#### 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)
- GPA: 3.888/4.0

#### Jan 2014 - Nov 2017

## School of Science and Technology (SST) • Singapore

- Sub-committee of SST Student EXCO Club
- <u>Talent</u> of SST Inc, Talent Development Program
- Member of the SST Floorball Club

# Experience

#### Aug 2023 – Jul 2024

#### Full-Time • Software Engineer • Ultraflow Engineering Private Limited, Singapore

- Led web development projects, designing and building full-stack websites that enhanced user experience and increased customer engagement, boosting sales by 300% and client retention rates by 150%.
- Optimized the company's network configuration by resolving technical issues and maintaining stable operations of Wi-Fi, network connectivity, and internal file management systems, reducing costs by 40%.
- Managed the invoice and quotation file systems to ensure accurate and timely financial processing, doubling the company's financial efficiency.

#### 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**

Feb 2025 - May 2025

#### ClientNest [link]

SOFTWARE ENGINEERING • TECH STACK: JAVA | JAVAFX | UML | CSS | INTELLIJ | GRADLE

- Developed a desktop-based Client Relationship Management (CRM) application as part of a NUS Software Engineering module to help young financial advisors manage client information efficiently.
- Designed key features for streamlined contact management, appointment tracking, and client data organization tailored to financial advisory workflows.
- Collaborated in a team to implement modular architecture, enhancing maintainability and scalability of the application.
- Prioritised user experience through intuitive UI/UX design and responsive interface built with JavaFX.

May 2024 - Aug 2024

#### Trackspence [link]

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! [link]

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 [link]

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) [link]

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 2<sup>nd</sup> place in the school's AY2020/2021 Semester 2 FYP Showcase.

#### Nov 2020 - Feb 2021

#### FishMon [link]

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 [link]

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 usergenerated 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 [link]

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 [link]

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

#### May 2024 - May 2025

#### **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