# HWANG MEI QI, FELICIA

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## Education

## National University of Singapore

Aug 2023 - May 2027 (Expected)

#### Bachelor of Computing in Computer Science (Honours)

• Coursework: Data Structures & Algorithms, Object-Oriented Programming, Data Management & Visualisation, Computer Organisation, Computer Networks, Introduction to AI and Machine Learning

## **Technical Skills**

Languages: Java, Python, C, C#, SQL (Postgres), JavaScript, HTML/CSS, R

Frameworks: React.js, Next.js, Express.js, Node.js, MongoDB Libraries: pandas, TensorFlow, Scikit-Learn, Matplotlib Tools: Git, Docker, RESTful APIs (Postman), UiPath

## Internship

## Software Engineer Intern | Monetary Authority of Singapore

Jan 2025 - Present

- Develop a data cataloguing solution with React.js for user-friendly interfaces, .NET Core APIs for backend services, PostgreSQL for data management.
- Conduct unit testing using .NET Core frameworks and automate UI testing with Selenium to ensure functionality and quality.

#### Digital Transformation Intern | Civil Aviation Authority of Singapore

June 2024 - Aug 2024

- Spearheaded the development and implementation of successful RPA workflows using UiPath for custom activities and data extraction techniques, leading to an 83% boost in workplace efficiency.
- Optimised IT request workflows by creating storyboards and collaborating with team managers to integrate suitable technology tools, saving over 10 hours of manual work per week.
- Conducted competitive analysis of six IT Service Management platforms, influencing the selection of a scalable platform for a potential rollout to 1,000+ staff members, ensuring it meets long-term organisational needs.

# Work Experience

## Software Engineer | NUS Fintech Society

Aug 2024 - Present

• Assisted in developing web-based applications using Next.js and TailwindCSS, transforming designer prototypes into functional interfaces.

## Undergraduate Teaching Assistant (CS2030) | NUS School of Computing

Aug 2024 - Nov 2024

• Mentored 24 students in lab sessions on functional and object-oriented programming in Java, and provided feedback on coding assignments, helping students improve code quality and design patterns.

#### Web Developer | Advisory Singapore

Feb 2024 - Jan 2025

• Improved UI/UX during a platform migration to Ghost by redesigning components with TailwindCSS, enhancing the overall user experience.

# **Projects**

#### Machine Learning Specialisation | Online Course by DeepLearning.AI and Stanford University

• Built and trained machine learning models, including regression, decision trees and neural networks, applied K-means clustering and anomaly detection, and built recommender systems using collaborative and content-based filtering.

## Full Stack Open | Online Course by University of Helsinki

- Developed full-stack applications with React.js, Node.js and MongoDB, implementing REST APIs, state management with Redux and robust testing with Jest, Vitest and Playwright.
- Built and containerised applications with Docker and Docker Compose, managing multiple containers.
- Engineered backend services using Express.js, MongoDB and PostgreSQL, incorporating advanced features like user authentication, and secure password hashing.

## MechHub E-Commerce Platform | Achieved Apollo (Advanced) level in the NUS Orbital program.

- Developed a full-stack e-commerce platform using React.js and Firebase, including social media features like following, liking, forums, and real-time chat.
- Created unit testings with Jest and React Testing Library, and conducted user testing, which revealed 80% of users were likely to use the platform.
- Utilised Zustand for state management and implemented CI/CD pipelines for automated deployments, resulting in 20% improvement in application performance and a 35% reduction in deployment errors.