Jeriel Chan Zhi Yang

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EDUCATION

National University of Singapore

Singapore

Bachelor of Computing in Computer Science and Mathematics (2nd Major) Graduating in May 2026

EXPERIENCE

Software Engineer Intern | Protechs Nutrition

April 2024 – Current

- Spearheading the development of an enterprise-level fitness tracking and social interaction app using React and TypeScript, integrating with Protechs Nutrition's protein-shake vending machine available nation-wide.
- Utilized Firebase for backend development, handling user authentication, data storage, and real-time updates.

Software Developer | Omega City

October 2023 - March 2024

- Developed a MMORPG Gamified LeetCode MVP using TypeScript, Phaser, and Parcel, enhancing peer-to-peer collaboration while learning code, addressing a 50% dropout rate in technical courses.
- Implemented the basic game structure, maps, UI, scoring, and advanced features such as server-client synchronization, player movements, code editor, and a chat system with Node.js, Express.js, and Colyseus.
- \bullet Built MVP for 100 beta testers and created a pitch deck, securing \$10,000 funding and incubation.

Technical Projects

Smart Personal Assistant (SPA) | Orbital NUS 2023 | Gemini (Intermediate Level)

- Developed a Flutter productivity mobile application integrating multiple daily-use applications into a single platform using Flutter and Firebase.
- Implemented machine learning for task suggestions using TensorFlowLite and an AI chatbot using rule-based mechanics and ChatGPT API with voice and text commands.
- Applied DevOps practices including testing with Mockito, gathering user feedback, deployment via GitHub, and thorough documentation.

Q.Now | IEEE iNTUition v8.0 2022 | Hackathon Champions

- Developed a Frontend MedTech Flutter mobile application that simulates and weighs the waiting time of private and public clinics in Singapore, using Flutter to improve long wait times during Covid-19.
- Implemented a predictive analysis model for market projections using Python.

NexusWrap | NUS Fintech Summit Hackathon 2024 | 3rd Place

 Developed a Bank-to-Bank / User-to-User conditional token-wrapping and atomic swap web prototype inspired by the XRP inter-ledger protocol using Next.js for the frontend, Express.js for backend services, Docker for containerization, and PostgreSQL for data management.

TriveTribe | NUS GDSC Hack4Good Hackathon

• Developed a gamified volunteer tracking platform using Next.js, Flask, and Pocketbase, enhancing engagement through events, experience points, and achievement badges to measure the impact of social good.

Other Projects

• Full Stack Webforum, Full Stack Blockchain Digital Asset Protection Platform, Unity3D Games, Frontend Websites/Mobile Apps, TechCrunch.com WebScraper Telegram Bot, Traffic Chat Bot using ChatGPT

TECHNICAL CO-CURRICULAR ACTIVITIES

Telegram Bot Developer | NUS Enterprise

December 2023 – Current

• Developed a telegram bot for managing hotdesking and administration for the entrepreneurial arm of NUS.

${\bf Front\text{-}End\ Mobile\ Developer}\ |\ {\rm NUS\ Sheares\ Residences}$

May 2023 – February 2024

• Developed a mobile app for Sheares Hall residents featuring essential services and event information.

Software Developer | Passionate HeARTS

May 2024 – Current

• Developing software for non-profit organization focused on children's storybooks and drawing activities.

Coding Tutor | Code For Community, Centre for Computing for Social Good & Philanthropy May 2024 - Current

• Developed and taught robotics and roblox coding to primary school children

ACHIEVEMENTS

IEEE iNTUition v8.0 Hackathon 2022 | Hackathon Champions

NUS Fintech Summit 2024 | Fintech Hackathon 3rd Place, Offered Fincubator Incubation

NUS VIP@SOC 2024 | Secured \$10,000 grant and Hangar Incubation.

NUS GroundZero 2024 | Top 3 in Sustainability, Offered Hangar Incubation

TECHNICAL SKILLS

Languages Java, JavaScript, TypeScript, HTML, CSS, Python, Dart, C#, Swift, Solidity, Ruby Libraries, Frameworks, Tools React, Phaser.js, Colysseus,js, Unity, TensorFlow(Lite), Flutter, Express.js, Firebase, PostgreSQL, AWS, Git, Ruby on Rails, RestFul APIs

Leadership & Teamwork

Officer Commanding in the Singapore Police Force's Special Operations anti-riot and counter-terrorism reservist unit. Operations Director for NUS Entrepreneurship and Deputy Head of Community Student Leaders, leading project teams.