Ryan Chen Rui Yang

(+65) 97322077 | ryanchen@live.com.sg | linkedin.com/in/ryanno3o | github.com/bipplane

PROJECTS

EcoTrack, Team Co-lead, NUS LifeHack 2025 Winner

Jun 2025

- Built an AI-driven "Wikipedia of product lifecycles" integrating a Chrome extension, interactive dashboard, and Telegram bot to generate community-verified sustainability scores and lifecycle summaries within a 48-hour timeframe.
- Engineered backend AI pipeline with OpenAI embedding, Postgres (including vector storage), and a custom tree-based algorithm to scale lifecycle summarisation, maintain performance, and handle 1000+ events per product.

TsFraudPmo, Team Co-lead, DSTA BrainHack CODE_EXP Finalist

May - Jun 2025

- Co-led development of TsFraudPmo, a real-time scam response ecosystem integrating a mobile app and Telegram bot to enable instant user reporting and rapid dissemination of verified scam intelligence.
- Implemented a custom LLM pipeline, leveraging prompt engineering, semantic embedding, and real-time input processing, transforming raw user reports into over 100 validated insights and concise summaries, enhancing data utility by 40%.
- Collaborated closely with a 3-person team and mentor to deliver a production-ready system under competition
 constraints, demonstrating strong product focus and cross-functional coordination.

TutorRec, Team Lead

 $\mathrm{Feb}\ 2025$

- Developed a cross-platform desktop application with both CLI and GUI to streamline student supervision for private tutors, reducing administrative overhead by an estimated 30% for over 100 students.
- Collaborated with a team of 4 to organise task distribution, brainstorm new application features, and achieve over 96% code coverage through comprehensive test case development.
- Orchestrated team communication and accelerated progress by managing resources under pressure, leading to the on-time delivery of 10+ key features and exceeding expected deliverables in a high-stakes environment.

RHDevs Inter-hall Hackathon, Team Co-lead

Dec 2023

- Developed and deployed a custom Telegram bot to enhance the room bidding process in residential halls, improving accessibility for 500+ residents and cut down bidding times by an estimated 50%.
- Led a team of 3 to clinch the award for 'Most Technical Hack', showcasing our ability to develop and implement a sophisticated project within a 24-hour time frame.

Work Experience

Cloud Engineer Intern – xCloud, HTX

May 2025 – Aug 2025

- Engineered and deployed automated workflows using Microsoft Power Platform and Workato, implementing an automated image ingestion pipeline for HTX HR using Power Automate and cloud storage integration, providing a reliable, production-ready workflow with end-to-end documentation.
- Deployed an end-to-end automated solution for tracking external contractor leave by connecting a SharePoint data source with an external API, reducing time spent on data syncing and email tracking across departments.
- Operated with minimal supervision to facilitate and organise cloud solutions, while working alongside DevOps, security, and product teams to address challenges and manage resources of 4 projects in a dynamic setting.

EDUCATION

National University of Singapore

 $Aug\ 2023-May\ 2027$

Bachelor of Computing (Hons.) Computer Science

- Relevant modules taken: Data Structures and Algorithms (CS2040C), Programming Methodology (CS2030S), Computer Networks (CS2105), Software Engineering (CS2103T), Wireless Networking (CS4222)
- AY24/25 NUS Raffles Hall Executive Committee
- AY25/26 CS2103T Student Teaching Assistant, Student Mentor
- GPA: 4.50, First Class Honours

CERTIFICATIONS

CS50's Introduction to Artificial Intelligence with Python, CS50's Introduction to Databases with SQL, SCS-AWS GenAI (Foundational) Programme

TECHNICAL SKILLS

Languages: Python, C++, Java, SQL, TypeScript, HTML, CSS

Frameworks & Libraries: React, JavaFX, Power Automate, OpenAI API, Telegram Bot API

 ${\bf Developer\ Tools:\ Git,\ GitHub,\ Docker,\ Gradle,\ CodeCov,\ Supabase}$

Cloud & Platforms: Microsoft Power Platform, Workato