

Ryan Loh Yong Rui

ryanloh29@gmail.com | +65 8876 7773 | www.linkedin.com/in/ryanlohyr | www.github.com/ryanlohyr

EDUCATION

National University Singapore

Aug 2022 - May 2026

Bachelor of Engineering, Computer Engineering

TECHNICAL SKILLS

Programming: (*proficient*): JavaScript, ReactJS, Python, C++, HTML, CSS, MySQL (*familiar*): C#, Go, MongoDB, Vue.JS

Technologies: Docker, Firebase, Vim, Redux Toolkit, Amazon Web Service, Prisma ORM, VIM, UNIX

WORK EXPERIENCE

Software Engineer | Google Developer Student Clubs NUS

Aug 2023 - Present

- Integrated **Auth0** to establish role-based authorization using **ExpressJS** and **NextJS**, ensuring secure access using JWT tokens and role-based logic
- Utilized **Prisma ORM** in conjunction with **PostgreSQL** to architect and maintain a resilient and efficient database system. Leveraging **Docker** for containerization and ESLint, Prettier and Husky for CI Pipeline.

Director of External Liaison | NUS Entrepreneurship Society

Jul 2022 - Present

- Managing a team of 10 members who are responsible for procuring speakers for the University Conference (UNICON) 2024.

Software Engineer Intern | Core Invest Institute

Jul 2022 - Aug 2023

- Led the end-to-end development of all key pages within the stock application, from concept to implementation. Utilized **ReactJS** and the **Flask** framework.
- Implemented techniques such as caching and lazy loading to improve user experience. Increased load times by over 20%.

Backend Engineer Intern | Core Invest Institute

Jan 2022 - May 2022

- Developed **Python** web scraper for 4000+ cryptocurrencies, extracting vital data for internal research.
- Increased in-house ranking system accuracy by 50% through Unit Tests in the **Flask** Framework for new/existing features, validating functionality and back-end quality.

Hackathon Coach | AngelHack

May 2023 - Jun 2023

- Provided guidance in software engineering and user centric principles to enhance teams performances.

PROJECTS

ByteDance x Orbital (Project for Bytedance)

May 2023 - Aug 2023

- Implemented an API Gateway using **Go** with service registry, discovery, and load balancing mechanisms for efficient request distribution among backend RPC Servers.
- Software Engineering Principles such as Single Responsibility and Interface Segregation were practiced.

Otdelit, Side Scroller Game

Jan 2022

- Side Scroller game created using **C#**. Utilized OOP principles while conducting weekly sprints to manage the project timeline efficiently.

NUSDeg (School project)

Oct 2023

- Architected and implemented a topological sort algorithm using the concepts of directed acyclic graphs to create a degree scheduling recommender.
- Led as the tech lead for the project in a team of four, spearheading system architecture and design, implementing an efficient Model-View-Controller framework in **Java**. Utilised **Gradle** for CI/CD and **JUnit** for unit testing

LEADERSHIP AND AWARDS

HackSingapore 2022 (1st Place)

Jun 2022

- Formulated a 'Volunteer-to-Task' Full Stack application which streamlines the allocation of volunteers to activities for FoodBank Singapore. Chosen as champions among 300 competing teams.

ADA AI Hackathon 2023 (Finalist)

Sep 2023

- Engineered a language bot with **OpenAI GPT-3.5** for grammar checking and **TensorFlow** recommenders to offer personalized question recommendations based on the questions they answered wrongly.
- Enhanced system performance by integrating **Amazon S3** for data storage and **Amazon RDS** for database management.

Tiktok Hackathon 2023

Sep 2023

- Implemented the **Stripe** payment gateway within a comprehensive full-stack payment solution, employing **Vue.js** and **Python**

Fundraising Organizer (Project Emphyrean)

Jun 2019

- Planning Committee for a student initiated (YMCA) project working with Singapore's Association for the Deaf. Led to a total of \$1500 raised.

Participated in other hackathon such as: TikTok Hackathon 2023, Global Game Jam 2021, GroundZero 2023