

RYUJI KOW JIE SI

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EDUCATION

National University of Singapore

Aug 2021 - July 2025

Bachelor of Engineering, Major in Computer Engineering

- Grade Point Average: 4.5/5, Honors (Highest Distinction)
- Second Major in Innovation & Design

WORK EXPERIENCE

EquityZen, Software Engineering Intern (New York, on-site)

January 2024 – December 2024

- Developed a RESTful API using Django REST Framework, allowing Yahoo Finance to access private equity data for over 13,000 companies seamlessly.
- Built an order-book matching system, implementing a backend matching algorithm in Django, improving trade efficiency by 25%.
- Optimized site load times by 20% through performance improvements in both the React frontend and Django backend, ensuring scalability for a growing user base.
- Delivered key product updates through Agile workflows, enhancing system reliability and performance.

Feeveo, Engineering Intern (Automation Startup)

February 2023 – April 2023

- Developed and tested a control system for an Autonomous Ground Vehicle (AGV) over 3 months.
- Implemented stepper motors for precise direction control via a microcontroller using the Modbus protocol.
- Optimized movement, resulting in a 30% reduction in positional and movement errors.

National University of Singapore, Teaching Assistant

January 2023 – April 2023

- Teaching assistant for CG2111A - Engineering Principles and Practices II.
- Provide students with advanced knowledge in certain computer engineering concepts.
- Facilitate discussions and practical sessions to reinforce concepts.

ACADEMIC PROJECTS

Autocare, Autonomous solution for transport of blood

- Deployment of an autonomous solution for transport of blood components in hospitals.
- Optimized workflow efficiency in transportation, resulting in a 60% reduction in delivery time.
- Built a React-Django system for real-time tracking, state management, and route optimization.

PC-Partpicker, CLI Application

- Developed a CLI tool in Java for managing custom PC builds.
- Utilized Git for version control and GitHub for collaborative development and code management.
- Applied object-oriented principles for modular design and scalability.

FPGA Project

- Programmed FPGA using HDL and Verilog to integrate a keyboard and PMOD screen.
- Developed a Typeracer game with a fixed phrase, measuring Words Per Minute (WPM) and displaying results on a seven-segment display.
- Leveraged Verilog for hardware description and control logic to manage user input and display output.

SKILLS

- Languages: Python, C++, C, Java, JavaScript, Verilog, R, HTML, CSS, GraphQL
- Technologies: React, Django, Next.js, Node.js, RESTful API, GraphQL, and Elasticsearch.
- Databases & Cloud: PostgreSQL, MySQL, AWS
- Languages: English (native proficiency), Chinese (working proficiency), and Japanese (limited working proficiency).
- Certifications: Wiley Certified Data Analyst.