

# ROWEN TEY KAI SEONG

(+65) 8884 7803 | [me@rowentey.xyz](mailto:me@rowentey.xyz)

[linkedin.com/in/rowentey](https://linkedin.com/in/rowentey) | [github.com/RowenTey](https://github.com/RowenTey) | [rowentey.xyz](https://rowentey.xyz)

Malaysian - Tuition Grant Holder - Require EP Sponsorship

## EDUCATION

Nanyang Technological University, Singapore

Aug 2021 – Dec 2024

Bachelor of Computing (Hons.) in Computer Science [CGPA: **4.70/5.00**]

- First Class Honours (Highest Distinction)
- Dean's List AY23/24
- Relevant courses: OOP, Software Engineering, Distributed Systems, Cloud Computing, Big Data Management

## WORK EXPERIENCE

IDEMIA, Singapore | Software Engineer (1 Year Contract)

Mar 2025 – Present

- Collaborated with a cross-functional team to build microservices for real-time border control service with **Angular**, **Spring Boot**, **MS SQL**, **Kafka**, **IBM MQ** and **Docker**.
- Leveraged transactional outbox pattern to solve dual write problems, ensuring consistency of pipeline data.
- Implemented distributing tracing with context propagation to improve service observability and reduce troubleshoot effort.
- Documented repository setup instructions and created data flowcharts to facilitate knowledge transfer.

IDEMIA, Singapore | Software Intern

May 2024 – Aug 2024

- Involved in full-stack feature development building event-driven microservices in **Angular**, **Spring Boot**, **Kafka**, **RabbitMQ** and **MS SQL** which serves **10k+ travellers** daily.
- Pioneered rapid prototyping of proxy messaging service with distributed **Apache Flink** cluster and experimented with several message queues to obtain optimal performance as proof of concept.

Thales Solutions Asia, Singapore | Data Engineer Intern

Aug 2023 – Dec 2023

- Engineered a **20%** reduction in data processing time by refactoring existing modules and applying concurrency through multithreading in **Python**.
- Prototyped ETL pipelines with **Pandas**, integrating OLAP and time-series databases with **Apache Superset** and **Apache Airflow** via **Docker Compose** for on-prem deployment.

Mereka Connect, Malaysia | Full-Stack Web Development Intern

May 2022 – Aug 2022

- Led migration efforts for legacy forms and client-facing pages using **Angular** and **Firebase**, improving codebase modularity and reducing total lines of code by **30%**.
- Adopted mobile-first approach to implement responsive UI aligning with **Figma** designs to enhance user experience.

## PROJECTS

[JustJio](#) | Personal Project

Oct 2022 - Present

- Spearheaded a team of 6 to build an open source events planning web app using **React**, **Golang**, and **PostgreSQL** within a **3 month** timeframe with proper SDLC.
- Served as sole-maintainer, iteratively added features such as room chat functionality through a de-coupled **WebSockets** server that subscribes to **Kafka** topics in an event-driven architecture
- Automated full-fledged CI/CD pipeline with linting, testing, security and code quality scans using **Sonarqube**, **Trivy** and **Github Actions** and provisioned separate environments to streamline development process
- Deployed production app on highly available **Kubernetes** cluster via self-managed home lab with 3 nodes

## SKILLS

- **Programming Languages:** Golang, Java, Python, JavaScript/Typescript, C/C++
- **Technologies:** React/Vue/Angular, Spring Boot, Docker, Kubernetes, SQL/noSQL, Redis, GCP/AWS/Azure
- **Languages:** English (Native), Mandarin (Native), Malay (Proficient), Japanese (Beginner)