
Work Experiences

Defence Science and Technology Agency (Software Engineer)

Jan 2026 - Present

- Developed a server monitoring tool using Java 17, Spring Boot and SQLite, leveraging PowerShell probes to automate software asset changes and alert users of backup failures.
- Built Dataiku dashboards and trained AI agents to analyse complex trends across data files and automate policy comparisons for the compliance stakeholders.

Stack: Spring Boot, Java, SQLite, PowerShell, Dataiku, Git

Hewlett Packard Enterprise (Software Engineer)

Jul 2023 - Jan 2025

- Developed real-time shell scripts for Aruba (AOS-CX) network utilising SNMP, CLI, and API calls to automate data collection and configuration changes, while driving SDLC improvements through module migrations and issue resolution.

(Software Engineer Intern)

Jan - May 2023

- Reduced support tasks by automation of unit test frameworks to evaluate network performance in a preprod environment.

Stack: Python, Bash, C, vtysh, Git

Acronis (Software Engineer Intern)

Jun - Dec 2022

- Deployed hardware-encrypted GCP infrastructure using Intel and AMD-SEV servers to benchmark performance and host Docker containers within secure, confidential computing Linux KVM environments.
- Implemented an ELK stack pipeline to index and search backup metadata, streamlining data retrieval across large-scale database and configuration files.

Stack: Java, Python, Golang, C, Docker, Git

Pixium Digital (Software Engineer Intern)

Jan - May 2022

- Developed full-stack web applications and HR tools using PHP, Yii 2.0 framework, jQuery, and AJAX, leveraging AWS S3 and LocalStack for scalable cloud data management and agile delivery.

Stack: TypeScript, JavaScript, PostgreSQL, MySQL, PHP, HTML, CSS, Yii 2.0, Docker, Git

Hubble (Software Engineer Intern)

Aug - Nov 2021

- Migrated a monolithic backend data system to an ecosystem of Ruby on Rails microservices, using Docker-Compose and K8s, with full API validation via Postman.

- Developed asynchronous web features in React, using Redux Saga for robust control flow and backend integration.

Stack: Ruby, TypeScript, Docker, MySQL, Git

Education

Nanyang Technological University · Bachelor of Computer Science · Elective Focus in AI & ML

Aug 2019 - May 2023

Civil Aviation University of China (Tianjin) · Overseas Industrial Training Program

Mar 2016

Singapore Polytechnic · Diploma in Aerospace Electronics

2014 - 2017

Technical Projects

[Task Tracking Web Application](#) (Personal Project)

May - Jun 2025

- Built a task tracker using Java and Spring Boot framework, with Maven and PostgreSQL for dependencies and database management to create, list, update and delete tasks. Created frontend features using React and npm packages.

Stack: Java, Spring, PostgreSQL, Node.js, Docker

[NozzieMozzie](#) (Software Engineering)

Jan - Apr 2021

- Created an Android mobile application with insightful clickable data visualisations to showcase dengue clusters as polygons in different regions of Singapore, using Android Studio, Google Maps SDK and NEA API in GeoJSON format.

Stack: Java, HTML, Postman

Skills

Programming Languages/Tools Proficient: Java, Python, SQL, Bash (Linux OS), Docker, Git

Exposure: C, PHP, GDScript, Golang, JavaScript, TypeScript, Ruby, SCSS, CSS, HTML, MATLAB, React, TablePlus, Postman, Yii 2.0, Koala, k6 (Grafana), Prometheus, KVM, QEMU, Android Studio, Google Colab, Spring

Conversational Languages Proficient: English, Chinese (Mandarin)