

YI JIAHE

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EDUCATION

Nanyang Technological University

B. Eng Aerospace Engineering w/ Specialization in Mechanical Engineering *GPA: 4.9* Aug 2017 - Jun 2021

EXPERIENCE

Government Technology Agency, Smart City Technology Division

System Engineer

Singapore
October 2022 - Present

- Develop and maintain system to ingest, process and store live data at ~50RPS from data of 5k+ EV chargers from over 20 operators to support national EV transformation efforts
- Develop systems, including the use of AI to modernize operations

Government Technology Agency, Sensors and IOT

R&D Engineer

Singapore
March 2022 - October 2022

- Build IoT and robotic systems for automation and enabling use cases for people of special needs

Shopee

Automation Engineer

Singapore
July 2021 - Feb 2022

- Maintained test environment using CI/CD tools to manage microservices and improve testing reliability
- Develop automated testing tools to auto-triage common test failures and escalate remaining failures to the process management workflow
- Implement tests ranging from unit test to end-to-end tests for new features as part of the software development lifecycle

SKILLS

Programming Languages:	Python, Typescript/Javascript, Golang, Java, Rust, SQL
Frameworks:	React, Spring
Cloud:	AWS, Azure, GCP
DevOps:	Docker, Kubernetes, Linux, GitOps
Languages:	English (Native), Chinese (Mother Tongue), Japanese (N2)

PROJECTS

HomeLab *Kubernetes, Linux, Tailscale, IoT*

Self-hosted "cloud" for home automation and personal services with private DNS resolver.

Palette58 and Tenta-series mechanical keyboards *Embedded, Rust*

Custom designed keyboards with companion desktop app

Fan website *Golang, Kubernetes, React*

Fan website with forecasting and visitor tracking

<https://fwmcbaubau.com>

Armored Core IV Garage *Kubernetes, Golang, PostgreSQL, React*

Service to save and share user created data with Discord provided OAuth 2.0 identity

<https://ac6.amesame.rocks/>

Minecraft on Demand *AWS, Terraform*

Serverless on demand minecraft hosting service supporting mods and telegram integration

https://github.com/Yi-Jiahe/minecraft_aws

Singapore Bus Timings *Kubernetes, GCP, Phoenix, Terraform*

Bus timings webapp with anonymous favourites using the official LTA Datamall API

<https://sg.bus.jiahe.dev>

Tunic Translator *Python, Docker, GCP, React*

Translation webapp for a phonetic-based runic language using Natural Language Processing

<https://tunic-lang.netlify.app>

E-ink Newspaper *Python, Flask, Node.js, AWS, Arduino*

Various endpoints to retrieve a variety of content for a eInk device utilizing various AWS services for caching data.

Stream Chat Terminal *Rust*

A command line tool built in rust using the Youtube API and OAuth to retrieve and post chat messages from the terminal.

<https://github.com/Yi-Jiahe/stream-chat-terminal>

Spotit *Python, OpenCV*

A computer vision based solution for drone detection and 3D localization of drones

<https://ieeexplore.ieee.org/document/9305485/>