

# LOH ZHI XUAN

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## WORK EXPERIENCES

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### **Thermo Fisher Scientific, Genetic Sciences Division, Full-Stack Web Developer** **Sep 21 - Present**

- Implemented & unit-tested features in React, Angular & Spring Boot according to product specifications.
- Stress tested REST API using Jmeter to derive usage limits for consumers.
- Developed a CICD pipeline to thoroughly test the code regularly to maintain high code quality.
- Maintained & upgraded existing desktop apps to incorporate new features & performance improvements.
- Evaluated web development technologies like HammerJS in the early stages of the SDLC.

#### **Achievements**

- Proposed & incorporated JSON schemas to improve data integrity & documentation of their current practices.
- Conducted training for the department to understand the potential benefits & applications of JSON schemas.
- Achieved “Honorable Mention” for Thermo Fisher Scientific internal regional hackathon.

### **ST Engineering Aerospace, Data Analyst Intern** **May 20 - Sep 20**

- Analyzed UAV flight data using MATLAB to investigate the causes of component failures.
- Discovered potential features to forecast failures on expensive aircraft components for predictive maintenance.

### **Red Dot Robotics, Assistant Robotics Engineer Intern** **May 19 – Aug 19**

- Executed a series of hardware stress tests to make sure that hardware can perform in tough conditions.
- Developed Python code to interface with UWB beacons for a robot localization programme.

## EDUCATION

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### **Singapore University of Technology and Design (SUTD)** **May 18 - Aug 21**

- Bachelor of Engineering (Engineering Product Development), Computer Engineering Track, Honors w Distinction
- Singapore Business Federation (SBF) Foundation Donor Scholarship.

## PROJECTS

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### **SingHealth Retail Management, Project Manager & Backend Developer** **Jan 21 – Apr 21**

- Liaised with the client for interim meetings to continually align the team with the client’s requirements.
- Developed backend code for an app to digitize and partially automate a retail audit process.
- Documented the API to facilitate cooperation between frontend & backend developers.

### **Project Design Odyssey (DO) Telegram Bot, Software Engineer** **Oct 19 - Feb 20**

- Proposed & developed a Telegram bot, using Python & AWS, to send scheduled event reminders to participants.

### **MRT NavBuddy Telegram Bot, Software Engineer** **Oct 22 - Feb 23**

- Designed & developed a Telegram bot, using Java & AWS, to alleviate the SG MRT commuter experience

### **Home Automation System, Developer** **Jan 21 - Dec 22**

- Designed & developed a “Google Home”-like replica, using Python & MQTT to enable voice interaction with my computer

## CO-CURRICULAR ACTIVITIES

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### **Thermo Fisher Scientific Toastmasters Club, President** **Aug 24 - Present**

- 2<sup>nd</sup> runner up, Area Table Topics Contest
- 2<sup>nd</sup> runner up, Area Speech Evaluation Contest
- Enhanced community visibility through email marketing campaigns

## ADDITIONAL INFORMATION

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- Technical skills: React, Angular, Vue, Python, Django, FastAPI, Spring Boot, Java, Jmeter, Amazon Web Services (AWS), Automation Anywhere
- Fluent in English and Mandarin (spoken & written). Enjoys making handicraft as a hobby (IG: [@wood\\_werkz](#))