

ZIHAN LIU

EDUCATION

XIAMEN UNIVERSITY | September 2018- June 2022

Bachelor of Electrical and Computer Engineering (Hons)

UNIVERSITY OF ZURICH | September 2022 - expected 2025

Informatics(Major in Data Science minor in Information System)

SKILLS

Computer Typescript, Javascript, React, Angular, Spring, PostgreSQL, C, Python, Java, R, MATLAB, Linux

Language Chinese(Native), English(Fluent), German(learning)

PROJECT

GAMING WEBSITE

February 2024 - Present

Full-Stack Developer

UZH Dynamic and Distributed Information Systems Group

- Developed a comprehensive gaming website using React framework
- Designed the front-end using HTML, CSS, and SCSS, creating an engaging and responsive user interface.
- Programmed the backend using Java with the Spring framework, integrating MongoDB for data management.
- Deployed the entire application by Google Cloud.

CITIZENOS WEBSITE

November 2023 - Present

Full-Stack Developer

UZH Zurich Empirical Software Engineering Team

- Contributed to the development of CitizenOS, a civic engagement platform focusing on the promotion of discussions on civic topics.
- Enhanced both front-end and back-end components using Angular for the front-end and Node.js for the back-end, with PostgreSQL@15 managing database operations.
- Implemented features for data statistics visualization and web page feedback applications to facilitate effective civic discussions.

EXPERIENCE

TESLA (GREATER CHINA INNOVATION R&D CENTER)

Nov.2021–August.2022

Low Voltage (LV) Service Engineer

Shanghai, China

- Responsible for the developing of automatic diagnosis script of low voltage system by using python
- Focus on analysis of some failure parts mostly vehicle controllers of Model 3 and Model Y
- Development of automatic test bench for LV controlling system
- Assist in the development and validation of new products
- Vehicle data acquisition and data analysis
- Maintain and write Model 3, Y, X service manual web page

HIKVISION (AN IOT PROVIDER)

Aug.2021–Nov.2021

Autonomous Driving System Engineer Assistant

Hangzhou, China

- Engaged in the design and development of automated parking system, completed functional and cost analysis of hardware devices like camera, radar sensor, etc.
- Assisted in designing PCB reference, visual calibration, and vehicle calibration
- Programmed the system for detecting the surrounding environment, tested the result of designed system like testing the generated 3D reversing vehicle photo
- Learned principles of camera signal transmission, completed dither testing using high-speed bandwidth oscilloscope
- Researched basic parameters of eye pattern, tested the dither of AVM video transmission path
- Performed condition monitoring and version updates using Serial and CAN tools
- Wrote Linux SH script to achieve switch control of signal output from control devices

PUBLICATION

Yecong Cao; Congzhe Gao; **Zihan Liu**; Jing Liu; Mingshi Liu, “Research on Scheduling Strategy of Electric Vehicle Fast Charging Station Combined with Photovoltaic Generation and Energy Storage”, 2021 3rd International Conference on Information Science, Electrical and Automation Engineering