

ZENG, ZIQIU (BETHANY)

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SUMMARY

Motivated computer engineering student with a focus on IoT and software systems. Experienced in software maintenance, hardware integration, and teamwork in professional environments. Enthusiastic about applying technical skills to innovate in areas like wearable technology and human-centered AI. Aims to bridge the gap between theoretical knowledge and practical applications to create impactful solutions.

WORK EXPERIENCE

Software Development Intern, Shanghai Dahua Surveying and Mapping Technology Co., Ltd. Aug 2024 - Present

- Supported back-end software systems development and maintenance.
- Integrated software and hardware components for mapping devices, contributing to smart city initiatives.
- Gained experience in software optimization and hardware-software interaction

Engineering Maintenance Department Intern, China Mobile Apr 2022 - Jun 2022

- Gained experience in maintaining and troubleshooting telecom infrastructure
- Supported routine system checks, updates, and preventive maintenance
- Collaborated across departments to diagnose and resolve technical issues, including equipment failures and connectivity challenges.

PROJECT EXPERIENCE

Keysight Singapore Engineering Challenge Aug 2023

- Developed a remote-controlled robotic system using Arduino Mega and Raspberry Pi
- Integrated sensors and motion modules for precise control
- Implemented real-time task management with an RTOS
- Developed secure encrypted communication protocols
- Applied OpenCV for object detection and manipulation algorithms

EDUCATION

Bachelor of Engineering with Honours (Computer Engineering) Aug 2021 - Present
National University of Singapore

- Specialization: Internet of Things (IoT)
- Second Major: Data Analytics
- Expected Graduation: 2026

TECHNICAL SKILLS

- Programming language: C#/C++, Java, Python
- Embedded Systems: Proficient in designing and developing applications for microcontrollers, experienced in integrating sensors, displays, and communication modules
- Hardware Prototyping: Skilled in FPGA development
- Machine Learning & AI: Data preprocessing, feature engineering, model training, object detection, model evaluation, and optimization.
- Languages: Fluent in English and Mandarin, with a basic proficiency in German.