KUNYANG XIE

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EDUCATION

University of Waterloo, Waterloo, Canada — Sep. 2021 - Dec. 2022
Master of Engineering in Software Engineering, GPA: 88/100

Univ. of Electronic Sci. and Tech. of China, Chengdu, China — Sep. 2017 - Jun. 2021
Bachlor of Engineering in ECE, GPA: 3.8/4

University of Glasgow, Glasgow, UK — Sep. 2017 - Jun. 2021
BEng in EEE with First Class Honors, GPA: 19.2/22

EXPERIENCE

Software Engineer — Jan. 2023 - Aug. 2024
Perle Systems Limited — *Markham, Canada*

- Developed and maintained the Web Manager, a user-friendly web interface for router configuration. Utilized **jQuery** and **Bootstrap** for the front-end, and C language along with **SQLite** for the back-end, enhancing system stability and optimizing performance.
- Managed the Cloud Router project, creating a cloud-based platform for remote router access. Developed the front-end using **React**, and the back-end with **SpringBoot**, enabling efficient and secure remote management of router settings, deployed and maintained the project on **AWS**.
- Contributed to the development of a standalone router project, enabling users to access the router web manager without a physical device. Packaged the project using **Docker** for easier distribution and deployment.
- Designed and implemented the router's cloud proxy in **Python** using the **requests** library. This proxy facilitated secure data exchange between the router and the cloud platform, and was efficiently deployed on the router systems.

Software Engineer — Mar. 2021 - May. 2021
Tsinghua University - Sichuan Energy Internet Research Institute — *Chengdu, China*

- Built a Gantry-style 3D printer, used and optimized open-source **Marlin** firmware, adapting and configuring it to meet the specific requirements of the printer design.
- Implemented the temperature sensor feedback mechanisms using **PID** controllers, ensuring preciser temperature controlling, thereby leading to a notable **10%** decrease in the adhesion rate of modeling materials.

PROJECTS

Student Management App for Consultant — Jan. 2024 - Apr. 2024

- Architected and deployed a real-time Student Management App by containerizing the front-end (**Vue 3**) and back-end (**SpringBoot**) services using **Docker**, and orchestrating them on a **Kubernetes** cluster to ensure high availability, scalability, and efficient load balancing.

Turbo Wallet - Money Management App — Jan. 2022 - Apr. 2022

- Led the back-end development to built a web server based on **Express.js** invoking **RESTful APIs** to respond the requests from the front-end, the project ranked top **3%** in the contest.
- Designed and implemented Non-relational database **MongoDB** to manage the income and expenditure records of users.

SKILLS

Languages	Java, Python, TypeScript, C/C++, SQL, Go, MATLAB, HTML, CSS
Frameworks	SpringBoot, Express, Vue, React, Flask, Django, Mocha, PyTorch
Tools & Skills	Linux, Git, Docker, Kubernetes, Nginx, AWS, Redis, MySQL, PostgreSQL, MongoDB, Kafka