

Ruoxi (Catherine) Wu

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Technical Skills

Languages C, C++, Java, JavaScript/TypeScript, Go, Kotlin, Python, Assembly
Frameworks and Tools Bash, Git, MongoDB, SQL, Node.js, React.js, Vue.js, Express.js, Django, AWS

Education

University of Waterloo | Bachelor of Computer Science

Anticipated Graduation: April 2025

Work Experience

Microsoft

May 2023 - August 2023

Software Engineer Intern | Windows + Devices

Redmond, Washington, US

- Gained expertise in native Windows application development using **C++**, **C#** and **XAML**.
- Successfully completed two new features for Windows Settings, **scheduled for shipment in Q1 2024**, following the **MVVM design pattern**.

Morgan Stanley

September 2022 - December 2022

Software Engineer Intern | Wealth Management Technology

Calgary, Alberta, Canada


- Worked with a large-scale equity management software **Java Enterprise Edition** and **Oracle SQL Database**.
- Refactored legacy website front end implemented with Google Web Toolkit and Java Spring frameworks into React single-page applications to **improve code readability** and **reduce coupling**.
- Prototyped the migration of 6 EJB APIs to **SpringBoot gRPC**, resulting in a **90% reduction** in local building time.
- Conducted **integration tests in Java** and utilized **agile scrum methods** to deliver high-quality code commits.

eBay

December 2021 – March 2022

Software Engineer Intern | Engineering Ecosystem & Experience

Shanghai, China


- Implemented a directed acyclic graph visualization library with **TypeScript**. The library has been used in **3 internal projects** and **has shortened more than 70%** of the code for rendering flow charts and tree-structured graphs. 
- Led the development of a new CD pipeline editor frontend in **eBay cloud console** supporting advanced features such as adding parallel tasks and node drag and drop with **React.js** and **Redux**.

Hokdo (MiraclePlus F21)

October 2021 – November 2021

Software Engineer Intern

Remote

- Coded two web pages in a customer relationship management MVP **showcased to 1000+ potential investors** on MiraclePlus Demo Day with **Vue.js** (frontend) and **Express.js** (RESTful API server).
- Built and deployed a **responsive server-side rendering** official website displaying product highlights and providing a chat widget using **React.js**, **Amazon EC2**, and **Nginx**. 

Xiaomi Technology

May 2021 – August 2021

Software Engineer Intern | MIUI Mobile Operating System

Nanjing, Jiangsu, China

- Developed **3 new features** (a new page for front-camera-related settings, toggle logic improvement, and refresh rate settings improvement), which have been shipped to approximately **80 million users globally**.
- Debugged and fixed 50+ issues regarding searching, accessibility support, Android Monkey crashes, layouts, and Application Not Responding errors in Xiaomi mobile system apps.

Projects

KWCSSA Voting System | A Fullstack Web Application

October 2022

- Deployed a fullstack web application with **Amazon ECS** and **Amplify** and supported **200+** audience voting for their favourite performances in a talent show hosted by KWCSSA.
- Architected a **MERN-stack** system that utilized **Express.js** to create a **RESTful API server**. Implemented the core feature of updating real-time results with **Socket.IO**.

Monkey Assistant | Raspberry Pi Photography and Social Media Assistant

October 2020 - November 2020

- Built a graphical user interface for taking selfies, applying filters and uploading pictures with Python **PyGame** and **PiCamera** libraries.