Yu Zhang

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EDUCATION

University of Wisconsin-Madison

Madison, WI

Master of Science in Computer Science

Aug. 2022 - May. 2024(Expected)

Zhejiang University

Hangzhou, China

Bachelor of Engineering in Electrical and Computer Engineering

Aug. 2014 - May. 2018

WORK EXPERIENCE

Qualcomm

Oct. 2020 – Dec. 2021

Software and Firmware Engineer

Shanghai, China

QualcommHD (An HD image transmission protocol based on Wi-Fi)

- Designed a real-time image transmission protocol based on Wi-Fi improving image clarity from 720P to 1080P
- Provided customized solutions and consulting services for drones companies like DJI to gain technical advantages

QCM2290 & QCM4290 (A high performance chip of Qualcomm)

- Developed the Wi-Fi roaming system based on 802.11 protocol for millions of devices using Qualcomm chips
- Recognized by more than 5 companies for solving all issues of Wi-Fi roaming and providing consulting service

Huawei

Aug. 2018 – Sep. 2020

Software Systems Engineer

Shanghai, China

HarmonyVS (An intelligent Voice SDK)

- Accomplished the intelligent voice-handling ability on all devices using HarmonyOS by designing the SDK connecting individually with Huawei Web Service
- Analyzed feedback on user experience, lead two coworkers and decreased customer complaints by 50%

FreeBuds (The flagship wireless earbuds benchmarking against Apple AirPods)

- \bullet Reduced the RAM consumption of the file system by 1/8 by designing a flash management algorithm that references MySQL
- Extended earbuds standby time four times longer than before by implementing a low power consumption system by introducing a thread voting algorithm and collaborating with the chip driver development department

Harmony LiteOS (The Internet of Things-oriented HarmonyOS OS having tens of millions users)

- Worked as one of 20 main contributors of the LiteOS open source repository (github.com/LiteOS/LiteOS) gaining 4.6K stars
- Increased the number of users by 20% by providing customers with customized solutions and consulting services
- Reduced file system issues by 70% by designing and deploying automated testing frameworks
- Provided network encryption security solutions by porting the latest open source Mbed TLS library

Academic Experience

Lead Teaching Assistant at UW-Madison

Sep. 2022 – Dec. 2022

- Worked for INFO424 Systems Analysis and Design and INFO371 Technology of Computer-Based Business Systems
- Guided students to complete front-end and back-end web design assignments and projects

Monitoring system for moving aircraft

Jun. 2016 – May. 2018

- Developed a moving aircraft detection system based on opency as the leader in the National Innovation Project
- Shared project experience and helped the professor design the representative Zhejiang University open source course Internet of Things System theory and Practice (icourse163.org/course/ZJU-1206632831) on Chinese MOOC

TECHNICAL SKILLS

Languages: Java, Python, SQL (Postgres), JavaScript, HTML/CSS, C/C++

Frameworks: React, Node.js, Flask, WordPress, RestAPI

Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, AWS