SONG GUO

Mail: gs199704@gmail.com | Phone: (+86)132-7705-0260 | GitHub: @erjiaqing | Linkedin: BG6TOE | UTC+8

WORK EXPERIENCES

Google (Nest) Jul. 2019 – (current job)

Thread / OpenThread Jun. 2022 – (current working)
Software Engineer, C++ / Java / Kotlin

- OpenThread (https://openthread.io/) is an open source implementation of the Thread network protocol for IoT devices released by Google.
- Designed and implemented a Thread network management daemon on Android platform for network provisioning and management for Android devices with Thread radio support.
- Brings Internet access capability to the OpenThread by designing and implementing the APIs for NAT64 and DHCPv6's prefix delegation. Landed on first party devices and supported integration of OpenThread reference device for Thread certification.
- Supported Thread features and management daemon on various first party products.

Connected Home over IP (CHIP, aka. Matter) Jun. 2020 – (current working)
Software Engineer, C++ / Python

- Designed and implemented core interaction model layer functions based on the specification of the interaction model of Matter, including asynchronous command handling, wildcard read request handling, chunked read response, chunked write request etc.
- Designed and implemented network commissioning cluster and the Linux driver for the network commissioning cluster.
- Maintained the CHIP-Repl Python library. This library is used by HomeAssistant.
- Maintained the Cirque E2E testing framework for CHIP.

Weave / OpenWeave Feb. 2020 – Jun. 2020
Software Engineer, C++

- Implemented an ESP32-based Weave border router for a reference implementation of Weave border router on embedded MCUs.

Factory Software Jul. 2019 – Jan. 2020
Software Engineer, C++

- Designed and implemented a new software to perform on-device testing in the factory for Linux based products. Reduced
- Achieved lower overhead and better extensibility than previous solutions.
- The software supports launch of few new products since 2019.

EDUCATION

Wuhan University, Computer Science and Technology Sep. 2015 – Jun. 2019
Bachelor's Degree in Engineering

LANGUAGES & OTHER SKILLS

- Chinese Mandarin (Native), English, German (A1-A2)
- Tools & Environments: Git, Docker, Linux etc.
- Other Languages: Golang, Rust, Vue (JavaScript) etc.