Yu Wei Wu

✉ wusyong9104@gmail.com · ⌨ wusyong · ⚲ wusyong.github.io · in wusyong

Brief

A software developer interested in system programming. Core memeber of Tauri cross-platform framework. Proficient in Rust and C, but comfortible with most general programming languages.

Education

National Chiao Tung University, Taiwan   08/2012 – 07/2016

Bachelor: Computer Science

Work Experience

BiiLabs Inc., Taiwan   11/2018 – 08/2019

(Cloud Services)   Software Engineer

- Improved computation bottleneck significantly with various approach like SSE/AVX SIMD acceleration and building embedded FPGA cluster with rabbitMQ.
- Developed microservices to accelerate accessing distributed system. Deployed and Monitored them with tools like Ansible and Grafana.
- Built the CI/CD environments with Buildkite. Maintained both cloud instances and local servers with Nginx and HAProxy. Learned a lot about Linux programming and its codebase.

Chuehfu Technology Ltd., Taiwan   08/2019 – 12/2020

(Distributed Storage Systems)   Senior Software Engineer - Protocol Team

- Developed the protocol of main system service. Built several essential components around the distributed system like async actor-based runtime, MPMC channel, and a fully hand-made protocol implementation to communicate with Cassandra / ScyllaDB.
- Mentored and guided other developers in the team become more familiar with various new tools and languages.
- Learned a lot about distributed system, working remotely, and databases.

Semnet Ltd., Ireland   01/2021 – Present

(System Programming)   Individual Contributor

- Focus on building foundation of all services across multiple platforms. Resolved all platform-specific issues while bringing each systems' capability for the team to build features on top of them. Researched toward possible goals and designed best solutions for the company to promote the products.
- Built the core compoment that work for all platforms and hence reduce complexity when developing them.
- Built native application solutions that reduce multiple overhead significantly.

Personal Projects

Tauri   https://github.com/tauri-apps/tauri

A framework that builds smaller, faster, and more secure desktop applications with a web frontend.

- Compatibile with any front-end framework which means developers don't have to change their stack.
- Supports cross-platform compilation to bundle binaries for major desktop platforms.

Wry   https://github.com/tauri-apps/wry

Cross-platfrom WebView library that supports all desktop platforms like Windows, macOS, and Linux.

Tao   https://github.com/tauri-apps/tao

Cross-platfrom Windows management library that supports all desktop and mobile platforms like Windows, macOS, Linux, Android, and iOS.

TRPL (Traditional Chinese Version)   https://github.com/rust-tw/book-tw

Traditional Chinese version of The Rust Programming Language, the official book on Rust.

Skills

- **Program Language**: **multilingual** (not limited to any specific language), especially experienced in Rust C, comfortable with C++ Haskell C# Objective-C Python Swift Racket (in random order).
- **Rust**: **5 years** of experience, have projects collected in Awesome Rust with over 40k stars in total, familiar with Cargo and Bazel, understand procedural macros, Rust asynchronous runtimes, and unsafe usage, contributed to Rust compiler and its tools from time to time.

- **System Programming**: **4 years** of experience, familiar with Linux programming interface and also other Unix-like OSes. Understand general architecture of the operating system and know how to write one from scratch. Also familiar with interfaces of all mainstream OSes from desktop to mobile, and able to develop on top of themwithout the help of any framework.
- **Profiling**: familiar with various tools such as perf, Flame Graph, Valgrind, and many kinds of sanitizers. Understand benchmarking, tuning, and producing useful graphic representations with gnuplot.
- **Database**: familiar with various databases such as Rocksdb, Cassandra, mariaDB, SQLite, PostgreSQL, etc. Understand concepts between different SQL/NoSQL databases. Can build protocol implementations without any help of ORM.
- **Development Tool**: can adapt to any editors / operating systems, usually use JetBrains IDEs and Vim under Arch Linux, have experience with team collaboration tools like GitLab, Jira, GitHub, ClickUp, Hackmd, Slack, Zenhub.

MISCELLANEOUS

- Languages: English - fluent, Chinese - native, Taiwanese - native
- Member of Tauri, Webview, rust-tw and more, contributed to rust, async-std, veloren, tauri, riscv-opcodes, grcov, windows-rs, gtk-rs, winit, smol, amethyst and other projects
- Get one-page version of the resume here: https://tinyurl.com/5bu836cy
- Get complete version of the resume here: https://tinyurl.com/ffw74czc