Weihang Lo

Software Engineer

Hello, there! I am Weihang Lo, a Rustacean that believes open source, open web and open community would make the world a better place.

• Specialized in Rust and Kubernetes solutions.
• Currently Focus on infrastructure development.
• Active contributor of Cargo and Rust Taiwan community ⊠.

Work Experience

Senior Software Engineer · SUSE

June 2021 -

• Contributing to Harvester GA release. Work on the control plane, VM integration, and disk management. Harvester is an open source HCI solution originated from SUSE and Rancher.

Software Engineer · Hahow 好學校

March 2018 - March 2021

• Developed autoscaling application to tackle surging demands of online-learning during COVID-19.
• Administrated Kubernetes clusters, Helm releases, Consul datacenter, and GKE/GCE infrastructures with alert/monitoring systems and CI/CD processes.
• Upgraded 5-year-old MongoDB cluster with minimum downtime by robust migration plan and monitoring.
• Designed and developed the migration of legacy order system to decouple business logic from third-party payment service and data storage layer.

Software Engineer · Hyweb

July 2016 - March 2018

• Given Outstanding Employee Award of 2017 (among 10 of 300 employees).
• Hosted front-end/Swift study groups and instructed participants from R&D department.
• Designed and developed software architecture of HyRead Ebook reader for both web and desktop platforms. HyRead is the largest B2Library Ebook service in Taiwan.
• Developed multi-threading download scheduler for HyRead 3 iOS App, which won 2018 Taiwan Excellence Award. (https://goo.gl/zyNpLq)
• Developed digital right management system (DRM system) including key distribution and management using Rust as a Node.js native add-on.

Education

National Taiwan University

BSc in Agriculture Forestry and Resource Conservation • 2012 – 2016

• Academic Excellence Award * 3 (for top 5% students in class each semester).
• Bachelor thesis: Developed compduter-simulated models to imitate a biodiversity assessment method based on human decision modeling.
• System Administrator (Linux) at Forest Mensuration Lab. Setup multiple Linux Debian computing servers (with tutorial) and configured MariaDB to solve insufficient memory issues while conducting simulations.
• Built social corpus with data mining and machine learning techs at Lab of Ontologies, Language Processing & e-Humanities (part-time).

Activities

Active Contributor of Cargo

For the past years, I have been contributing to Cargo, the official package manager of Rust. Volunteering to answer questions, review pull requests, fix bugs, and join discussions about Cargo development.
As of February 21st, 2022, I have been the second most active contributor since the COVID outbreak.

Talk: Our Future in Rust

Gave a talk at COSCUP 2019, one of the largest open source conferences in Asia. The talk is about asynchronous programming primitives in Rust.
Here are the slides: https://bit.ly/2ZzG1iy
Here is the presentation: https://youtu.be/IDHFc3tO7-s

Rust Algorithm Club

A collection of articles about building algorithms and data structures with Rust. (GitHub repo)

Translation of Official Rust Guide Book

Co-translated Traditional Chinese version of the official Rust guide book "The Rust Programming Language".

Skills

Professional

- Rust, Cargo, Go, Node.js
- MongoDB, Redis, React, GCP, NGINX
- Kubernetes development, OS, storage management

Experienced in Production

- TypeScript, Python, Swift/Objective-C
- PostgreSQL, SQLAlchemy, Protocol Buffer
- Consul, Serverless, AWS CloudFormation/Lambda