Eric Huang

Senior Site Reliability Engineer

<u>Certified Kubernetes Administrator</u>, open-source enthusiast, and detail-oriented software engineer with expertise in automation, observability, and cloudnative solutions. Skilled in problem-solving and system optimization, aiming to enhance reliability, efficiency, and scalability.

Work Experience

Site Reliability Engineer

Engineering Dept., LINE Taiwan Limited

Dec 2022 - Present

Taipei, Taiwan

- Optimized log collection pipelines at LINE Taiwan and upgraded the self-hosted Loki, achieving a 3x increase in log ingestion and query performance (P99 under 10s), while eliminating object storage overhead and reducing costs by 70%.
- Co-maintained the organization-wide <u>internal Terraform provider Terda</u>, and actively promoted Terraform adoption and advocacy within LINE Taiwan.
- Introduced Grafana Alloy and Faro SDK at LINE Taiwan, enabling end-to-end tracing and real user monitoring. Presented this work at COSCUP 2024.
- Developed a Go-based SDK to wrap the successor infrastructure API post-LY merger, ensuring maintainability and client-agnostic design.
- Created automation tools, including a Slack workflow automation framework and GitHub Actions, to improve operational efficiency and quality.
- Designed and implemented an internal infrastructure cost calculator, metrics snapshotter, and dashboards, providing visibility into private cloud spending and enabling cost optimization.

Senior Engineer

Intelligent Banking Division, E.SUN Bank

May 2021 - Dec 2022

Taipei, Taiwan

- Designed and built a robust monitoring/alerting system that collected 15+
 GB of metrics daily across 100+ servers.
- Managed Kubernetes administration and migration for 8 clusters (60+ nodes) with 95% and 99% SLA.
- Adopted automation tools to construct production-grade and GPU-accelerated Kubernetes clusters, contributing to upstream <u>Kubespray</u> and backporting to existing playbooks.
- Developed tools to automate daily routines, configuration management, application deployment, and system validation tasks, significantly reducing operational costs.

Projects

Rust Playground with WASM

• Forked <u>Rust Playground</u> to render WebAssembly from compiled Rust code in the browser and integrated it into <u>mdBook</u>.

Court Reserver

 Developed a Rust CLI program for Taipei Metropolitan court reservations, enabling concurrent reservations to avoid manual operations on browsers or apps.

- in Chen-Yi Huang
- github.com/titaneric
- titaneric.com
- ☑ chenyihuang001@gmail.com

Skills

Programming

Python • Go • Rust

Technologies

Kubernetes • Containerization • Nvidia Cloud-Native Tech • Linux SysAdmin • TCP/IP • Observability • ArgoCD

IaC, CI/CD

GitHub Actions • Terraform • Ansible

Education

MEng

Data Science

2018 – 2020

National Chiao Tung Univ.

BSc

2014 – 2018

Computer Science

Yuan Ze Univ.

Articles

- Grafana Alloy Best Practice
- [transl.] Terraform for Verda A journey of Infrastructure as Code for our private cloud
- The Journey to the Kubernetes Networking
- The Journey to the Kubernetes metrics
- <u>Buddy System</u>
- More...

Contributions

Enhanced VRL Functions and Vector Components

vectordotdev/vrl, vectordotdev/vector

Reduced Redundant Calculations in Backpropagation

• pytorch/pytorch, jax-ml/jax

Fixed Low-Level Golang Map Traversal in eBPF

• grafana/beyla