

莊品毅

CHUANG, PIN-YI

SYSTEM ARCHITECT



📞 (+886) 0980-543-044

✉️ 880831ian@gmail.com

🐙 @880831ian

🌐 <https://pin-yi.me/>

## SUMMARY

Site Reliability Engineer (SRE) and System Architect (SA) with 3 years of experience, specializing in building and managing cloud infrastructure on GCP and AWS. Proficient in Infrastructure as Code (IaC) practices, utilizing tools like Terraform and Terragrunt to manage and automate cloud resources.

Led and contributed to multiple architecture design projects, including :

- Design of a disaster recovery (DR) solution for migrating from GCP to AWS
- Implementation of SSO integration and permission management across multiple AWS accounts
- Cloud cost optimization, helping the company reduce expenses by approximately **USD \$6,000 within one month**

Passionate about exploring new technologies and skilled in writing technical documentation and planning internal training programs. Capable of translating complex technical concepts into practical, easy-to-understand solutions for cross-functional teams.

Actively maintain a personal tech blog and regularly participate in offline tech community events. Enjoy exchanging ideas with engineers from various domains to broaden technical perspectives.

## WORKING EXPERIENCE

### ● SYSTEM ARCHITECT

VAN GOOD TECH | 2024/10 - Present

#### **AWS architecture design, implementation, and access management**

1. Designed a multi-cloud architecture with disaster recovery from GCP to AWS, ensuring infrastructure scalability and flexibility.
2. Built 17 Terraform modules to standardize environments and shorten team ramp-up time.



3. Authored 40+ technical documents, covering topics such as AWS IaC guidelines, AWS vs. GCP service comparisons, Graviton migration performance and cost optimization analysis, and various test reports.
4. Responsible for service deployment and CI/CD automation across multiple projects, ensuring stable and efficient operation on AWS.
5. Assisted R&D in researching and deploying AWS macOS GitLab Runners for iOS app builds. Responsible for resource provisioning, issue troubleshooting, and optimization to ensure smooth CI/CD workflows.
6. Collaborated with AWS partners to implement AWS Organizations and IAM Identity Center, centralizing account and permission management to simplify resource governance while ensuring security and compliance.

## **Cloud service architecture restructuring and internal network identification optimization**

1. Redesigned the overall service architecture, implementing Internal DNS to eliminate IP dependencies, enhancing the identification and consistency of internal APIs. Considered cross-cloud compatibility between GCP and AWS, laying the foundation for future Service Mesh implementation.
2. Optimized the network architecture by shifting some on-premise traffic to cloud services, successfully reducing on-premise device load and reliance on dedicated lines. This improved system stability and operational efficiency, while significantly lowering equipment and bandwidth-related costs.
3. Separated dynamic and static services, leveraging an accelerated CDN to improve static resource loading efficiency and enhance user experience.

## **Implementation and deployment of Datadog monitoring system**

1. Led the implementation of Datadog in the technical department, integrating previously scattered monitoring systems across units. Improved data centralization and visualization, resulting in a **90% improvement in query efficiency**, significantly accelerating cross-team debugging and coordination.
2. Collaborated closely with the Datadog technical team to ensure company requirements aligned with best practices.
3. Authored technical documentation to assist the team in rapid adoption, ensuring long-term stability and maintenance of the monitoring system.

## Tracking technology trends and problem-solving

1. Proactively monitored GCP GKE mandatory upgrade announcements from unregistered release channels, wrote response plans and inspection scripts to help the team avoid service disruptions due to upgrades, and prevented premature switching to the Extended Channel, saving approximately **\$3,000** in costs.
2. Monitored changes to Docker Image Pull Rate Limit policies, proposed and validated solutions to ensure the stability of CI/CD workflows, preventing disruptions due to rate limits.
3. Compiled the latest technical announcements and corresponding action plans, and shared them in a public meeting with all technical department members, effectively enhancing the department's understanding to technical changes.

## ● SITE RELIABILITY ENGINEER

VAN GOOD TECH | 2022/02 - 2024/10



### Implemented and optimized IaC toolchain, building a consistent and automated infrastructure deployment process.

1. Implemented Helmfile to manage over 50 Helm Charts, ensuring consistency and repeatability in Kubernetes application deployments, enhancing maintainability and standardization.
2. Refactored the Terragrunt architecture, standardizing Terraform modules and directory structure to enhance IaC management readability, significantly improving operational efficiency and team collaboration quality.
3. Developed 12 Terraform modules to drive infrastructure modularization and standardization, replacing UI operations to avoid configuration discrepancies. Introduced version control mechanisms, significantly reducing human errors and operational risks.
4. Built CI/CD automation pipeline integrating Helmfile and IaC, accelerating service deployment and infrastructure rebuilding, reducing delivery time.
5. Implemented the principle of least privilege, systematically auditing and removing redundant IAM permissions to enhance infrastructure security and ensure internal compliance.

### GCP cost optimization practices

1. Optimized Prometheus monitoring architecture by adjusting Samples Ingested settings, analyzing and filtering metric sources. Achieved significant reductions in storage and compute resources without compromising monitoring quality, saving approximately \$200 per day.

2. Collaborated with R&D to optimize log structure by removing invalid and redundant messages, reducing unnecessary storage costs, and significantly decreasing log space usage and long-term storage expenses.

## Proficient in the GCP ecosystem and hands-on SRE/DevOps practices

1. Experienced in core GCP services including GKE, GCE, GCS, Cloud Load Balancing, Cloud SQL, Memorystore, VPC, and IAM, with solid hands-on expertise in setup and operations.
2. Skilled in GitLab, GitHub, Jenkins, and Ansible; planned and implemented CI/CD automation pipelines to enhance development and delivery efficiency.
3. Built a comprehensive monitoring and logging system using Fluentd, Elasticsearch, Kibana, and Google Managed Prometheus to enable performance monitoring and issue tracking.

## CERTIFICATIONS



### Google Cloud Professional Cloud Architect

Certification ID : ed519d0fcb984d428460841eb83419c8

Issue Date : Feb 21, 2025

Expiration Date : Feb 21, 2027



### RED HAT CERTIFIED ENGINEER (RHCE)

Certification ID : 190-008-011

Issue Date : July 5, 2019

Expiration Date : July 5, 2021



### RED HAT CERTIFIED SYSTEM ADMINISTRATOR (RHCSA)

Certification ID : 190-008-011

Issue Date : Jan 11, 2019

Expiration Date : Jan 11, 2021