Siou-Jhih Guo

Site Reliability Engineer

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Work Experience

Yellobrick Data

London, England

DevOps Engineer

Oct. 2021 - Present

- Mainly worked on cloud native data lake product(AWS-based).
- Worked on CI/CD pipelines(Jenkins-based, involves Python/Bash Shell/Terraform/Ansible scripts) for build/test/deploy jobs automation. Saved 20-30% times for developers and operation engineers on these tasks.
- Designed and constructed logging solution(Loki/Grafana/K8S-based) to replace legacy log storage/browsing approach. Saved support and operation engineers 60-70% times on log collecting/analyzing task. Also reduced about 40% bug-fix/issue addressing time.
- Designed and constructed Python based client library/CLI-tool for programmatically controlling cloud product infrastructure. Saved customers and internal engineer teams 30-80% time on infrastructure management.
- Addressed and fixed 3-5% infrastructure level and deployment issues for cloud product related IaaC.

Amazon Web Service(AWS) EMEA SARL(Irish Branch)

Dublin, Ireland

Cloud Support Engineer

May. 2021 - Aug. 2021

- In addition to Support Engineer's responsibility, also help build Mandarin Support team in Ireland from scratch, which reduce about 30% of on-call work time for Support Engineer in Taipei and SEA region.
- Develop internal tools based on Django(Python)/Nginx/MySQL/ECS. Which reduce 30-40% workload for manager and engineers.

Amazon Web Service(AWS) Taiwan

Taipei, Taiwan

Cloud Support Engineer

Aug. 2019 - Apr. 2021

- Worked for Deployment profile, which was responsible for helping customers solve questions about container and deployment related AWS services. Including: Amazon Elastic Container Service(Amazon ECS), Amazon Elastic Kubernetes Service (Amazon EKS), AWS App Mesh(AWS hosted Envoy control plane), AWS Code-series services(AWS CodeCommit, AWS CodeBuild, AWS CodeDeploy, AWS CodePipeline), AWS Infrastructure as code services(AWS CloudFormation, AWS CDK), AWS X-Ray(AWS hosted tracing service) and AWS Batch.
- My service saved 35%-65% times for users who have general guidance issues, such as how to set up AWS services, write minimal sample code to work with AWS services, construct prototype, or troubleshoot configurations.
- For critical issues which caused AWS service down or break service functionality, with my work, 20%-55% time could be saved for users who looks for workaround/solutions. Besides, if the problem involves bugs in AWS service side, I could also save 15%-40% time for AWS developer team on tracing code or figuring out conditions to reproduce issues to solve bugs.
- Under some circumstances, problems were caused by network connectivity/OS performance issue, or open source projects' source code/configuration. With my wild range of different troubleshooting skills and knowledge, 20%-60% time could be saved for users encounter these kind of issues.
- Having great communication skills to cooperate with customers to save them 50%-75% time on figuring out real problems for their issues, and finding most suitable solutions for them.

Bo-Ning Tech. Corp.

Hsinchu, Taiwan

Development Operator(DevOps)

Feb. 2017 - Aug. 2019

- Worked on containerizing services for easier deploying and testing. Also constructed Drone and GitLab based CI/CD pipeline to improve developing and releasing efficiency. It saved developers 50% of time on handling applications releasing work.
- Constructed EFK based monitoring solution for services. It reduced 60% time for developers to address issues and decreased 40% service down time.
- Managed solutions and applications used on GCP and Docker Swarm. Comparing with original bare metal solution, it decreased 45% service downtime and 40% service releasing cycle time.

IChen Corp.

Taipei, Taiwan

Software Engineer

Sep. 2015 - Feb. 2017

- Design and constructed FreeSwitch 1.6 based VoIP communication solution for parking lots intercom system. Also developed embedded VoIP client based Raspberry Pi and Python/C-Language. The system replaced phone based solution and saved 60% costs.
- Designed and developed self-serve system for parking lots which allows customers to park vehicles and pay by license plates without human parking officers. It reduced users and parking lot managers/clerks 60% of time on paying and verifying.
- Designed and developed self-serve system for restaurants which allows customers ordering and paying without human receptionist. It reduced users and clerks 60% of time on paying and verifying.
- Constructed and managed infrastructures(GCP and OpenVPN) and CD-chain(GitLab and Ansible based) for accounting and Customer Relation Management(CRM) server for self-serve system of parking lots and restaurants. It reduced 55% of IT cost, 30% service downtime and 55% service releasing cycle time.

Tamkung University(TKU)

New Taipei City, Taiwan

Teaching Assistant

Jan. 2017 - Jan. 2019

- Developed a Spark Cluster Constructor for teaching purpose. The solution was based on Django 1.11,Docker-swarm, Docker-compose and Docker-API. It allowed students could quickly construct Spark cluster in containers on Web-GUI in 1 clicks for purpose of teaching. The system saved students 100% of time on learning and constructing Spark cluster by themselves, and saved 95% of costs for school(the system was constructed on deprecated hardware).
- Constructed Hadoop cluster for teaching purpose. The solution was based on HDP(Hortonworks Data Platform) and used Ansible Playbooks for deployment and management. The system saved students and teachers 100% of time on learning and constructing Hadoop cluster by themselves.

Tamkung University(TKU)

New Taipei City, Taiwan

Private Cloud Maintainer

Aug. 2013 - Jun. 2016

- Constructed an OpenStack (Kilo) based solution as private cloud of Department of TKU CSIE. It replaced VMWare-based virtualization solution and reduced 85% IT costs. The system involved the following components: Nova(computing), Glance(image), Horizon(dashboard)and Keystone(identity). In addition, Network solution was Openstack Legacy Network based.

Education

TKU (Tamkung University)

New Taipei City, Taiwan

M.ENG. in Computer Science and Information Engineering

Jan. 2017 - Jan. 2019

- Master Thesis: Let Machine Read Candlestick Charts Like Human Beings - Forecast trend of stuck/future price by analyze candlestick charts. Comparing performance between traditional approaches and deep learning based solutions such as Convolutional Neural Network(CNN) and Recurrent Neural Network(RNN).

TKU (Tamkung University)

New Taipei City, Taiwan

B.ENG. in Computer Science and Information Engineering

Sep. 2012 - Jun. 2016

- Graduation Project : VoIP over SDN(Software Defined Network) - A project to demonstrate flow-control ability of SDN which could improve performance of network-sensitive applications, and the network application for demonstration was a VoIP application. In the project, I constructed network infrastructure by Floodlight and OpenvSwitch 1.6 which based on OpenFlow 1.3.

Writing

Hallblazzar : Developer's Journal

Medium

Founder & Writer

Mar. 2018 - PRESENT

- Link: https://medium.com/@hallblazzar
- Record progress and solutions of encountered problems while developing projects.
- Impressions and notes of newly learned knowledge and technologies.

Predicting the price movement from candlestick charts: a CNN-based approach

IJAHUC

Chih-Chieh Hung, Ying-Ju Chen, Siou Jhih Guo, Fu-Chun Hsu

2020

- International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC), Vol. 34

Deep Candlestick Predictor : A Framework Toward Forecasting the Price Movement from Candlestick Charts

Taipei, Taiwan

Siou Jhih Guo, Chih-Chieh Hung, and Fu-Chun Hsu

Dec. 26th-28th 2018

- PAAP'18 - The 2018International Symposium on Parallel Architectures, Algorithms and Programming

Let Machine Read Candlestick Charts Like Human Beings

Yokohama, Japan

Siou Jhih Guo, Chih-Chieh Hung, and Fu-Chun Hsu

Nov. 12th-14th 2018

- IDAA 2018 - International Workshop of Intelligent Data Analytics and Applications, Joint with JSAI International Symposia on AI

Language Skill

Mandarin

Native

- Writing: native / Speaking: native / Reading: native / Listening: native

English

Intermediate

- Writing: intermediate / Speaking: conversational / Reading: intermediate / Listening: intermediate