Shawn Wang

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Career Objective

With a **Master of Information Technology by research** from RMIT University and **over 4 years** of experience in the IT industry, including **1.5 years** of software development experience in the real industry, and selected as **1 of 24** participants in the **Australian Computer Society Victoria Technology Talent Program**, I possess practical expertise in Web development and algorithms using Nodejs, Reactjs, .Net core, and Flask. Additionally, I have gained valuable experience as a **DevOps Engineer** on several large-scale commercial team projects, working with **agile methodologies** to deliver high-quality work. With excellent interpersonal skills and fluency in both English and Mandarin, I am eager to contribute my skills and knowledge to an innovative team.

I am currently seeking opportunities in the field of **DevOps/Cloud Engineering**.

Skills & Certificates

Expert Core Skills:

- **Containerization/Orchestration**: Docker, docker-compose, AWS ECS

- **Terraform**: Modules, WorkSpaces, S3 state & Dynamodb lock, Meta-Arguments, and built-in funcs

- **AWS**: ECR, Lambda, API Gateway, EventBridge, VPC, NAT, RT, Internet Gateway, VPC Peering Connection, ALB, ASG, Route53 (DNS), CloudFront, S3, EC2, SG, IAM, KMS, SSO, SMS, SNS, CodeBuild, CodeDeploy, Dynamodb, Elastic Beanstalk, Amplify

- **Azure**: AAD, ACR, DNS, VM, VNet, NSG, Load Balancer, Azure SQL Database, Storage Account(Blob Containers), Azure Insights

- **CI/CD**: Jenkins deployment, Jenkins pipeline setup, Jenkins Blue Ocean, GitHub Actions

- **Linux/Bash Code**: App Env setup, Internet, storage, file operations, bash script, regex, Cron job

- **SCM(Source Code Management)**: Git, Github, Bitbucket

- **Project Management**: Agile Methodology(JIRA), Notion(Docs), Kanban

Proficient Skills:

- Orchestration: Kubernetes(EKS, AKS), Helm(Nginx LB, Cert-manager, EFK)

- CM/Automation: Packer, Ansible, CloudFormation

- Programming language: Python3, Java(v11), C#, T-JavaScript, Groovy(For Jenkinsfile)

- Web Backend Framework (Flask, .Net Core(v3.1), Nodejs(v16))

- RDBMS (Azure SQL Database, PostgreSQL(T-SQL), SQL Server(T-SQL) 2019, MySQL8.0, SQLite)

- NoSql (AWS DynamoDB, MongoDB)

- OS: Ubuntu(20.04), PowerShell, Amazon Linux

- Monitoring/Logging: AWS CloudWatch, Prometheus, Grafana, Elasticsearch, Fluentd and Kibana

- Code Quality Testing: Snyk, Sonarqube, CodeQL(Github Actions)

Industry Experience

Organization: Companet Alliance   Mel, Australia
Product: PetsLovers with CI/CD, IaC, and Kubernetes on AWS & Azure   Feb. 2023 - Current
DevOps Engineer

Objective: To leverage my DevOps expertise in building and deploying highly available mobile web portals using **Nodejs, Reactjs, and Chatgpt API with Lambda and API gateway**, while employing containerization, orchestration, and automated build tools.

This project contains 6 full-stack developers, 2 DevOps engineers and 2 Business analysts.

Tools: Jenkins, Terraform, AWS Managed Kubernetes Service(EKS), Azure Cloud Kubernetes Service(AKS), Helm, eksctl, Docker, Docker Compose, ECR, ACR, CloudFormation, IAM, SSO, OIDC Federation protocol, Bitbucket, JIRA, Grafana, KMS, CloudWatch, SNS, EFK

Duties:

- Deploying the production backend using k8s manifests, which include **Ingress, Cluster Role, Role Binding, Deployment, HPA, Namespace (NS), Secret, and Probe, on EKS and AKS**

- Utilizing EKS EC2 instances to host backend services and deploying **AWS Load Balancer Controller and External DNS**, which is associated with an IAM **OIDC** provider and a **service account**

- Building AWS and Azure resources with **Terraform**, ensuring high availability and managing accessibility of EKS and AKS clusters using **RBAC and IAM**

- Deploying AKS VM instances to host backend services with **Cert Manager and Nginx DNS** to enable context path routing and certificate with **ADD service principle**

- Setting up a **failover** mechanism from EKS to AKS using Route53 for high availability

- Implementing the **Elasticsearch, Fluentd, and Kibana** (EFK) stack for analyzing logs and creating visualizations for application and infrastructure monitoring, which makes troubleshooting faster.

Outcome: Through extensive use of containerization, orchestration, automated build tools, and agile methods, we were able to accelerate the building, packaging, and deployment of high-availability products, while optimizing development processes, improving efficiency, and enhancing quality. Mobile Web Link

Organization: Avanger   Mel, Australia
Product: Gamera with CI/CD, and IaC on AWS   Oct. 2022 - Jan. 2023
DevOps Engineer

Objective: Refactored a comprehensive web portal utilizing **Java Spring Boot** & **Reactjs** with **Gradle**, ensuring high performance, scalability, and security through DevOps practices including automated testing, CD/CD, and infrastructure as code.

This project contains 8 full-stack developers, 4 DevOps engineers and 1 Business analyst.

Tools: Jenkins, Github Actions, Terraform, Packer, Ansible, Docker, Docker Compose, ECS, ECR, API gateway, Event bridge, Lambda, Private VPC, RT, Internet Gateway, NAT, CloudFront, Route53, S3, IAM, JIRA, KMS, CloudWatch, SMS, SNS, Snyk and Sonarqube

Duties:

- Deployed the production backend (**ECS Fargate**) in a private VPC subnet across different availability zones to ensure high availability and security.

- Implemented Multi-branch Pipeline for branches of the same project, which allowed teams to have different environments(**Prod** and **UAT**) for different branches.

- Integrated Jenkins and Github Cloud through web-hook and OAuth Consumer, setting up email notifications and Slack notices of pipeline build status, which improved teams' work efficiency.

- Utilized **Packer** and **Ansible** to build Jenkins master and slave nodes AWS **AMI** to release high concurrent stress for increased pipeline computing resources configurations, improving the efficiency and reliability of our CI/CD process.

- Set up the integration of **SonarQube** and **Snyk** with the Jenkins pipeline to gather and analyze source code and NPM packages, producing reports on code quality and package vulnerabilities.

Outcome: Successfully implemented DevOps practices including CI/CD, infrastructure as code, and automated testing using a comprehensive toolchain, resulting in accelerated product development and improved system security for the Gamera web portal project. The implementation of a secure Cloud System Architecture and rigorous security testing minimized potential risks. Web Link

Oli TechFin — Mel, Australia
Software Engineer — Feb. 2022 - Feb. 2023

- Ensured high availability of MT5 (MetaTrader 5) servers by maintaining main and alternative servers across regions and cloud providers such as **AWS, GCP, and AliCloud**, while monitoring the system's running status using **AWS CloudWatch, SNS, and Grafana**.

- Deployed various AWS services to complete different stages of product development, including deploying the frontend and backend with Amplify, NS, SMS, SDKs and so forth Mr.Market

- Utilized EventBridge, API Gateway, Lambda, and DynamoDB to wrap a finance news API for backend development, which reduced the total cost by **40%** per month and demonstrated ownership.

- Building a data streaming pipeline for MT5 and implemented historical **data crawling** using **Python** to extract data to enrich the Valktrade database to attract customers.

- Developing the **backend RESTful APIs** using Python, Flask, Flask-Smorest, and Flask-SQLAlchemy to create a platform that enables clients to post ads through their Google Ads accounts.

Education

Performance Education — Mel, Australia
Professional Year — Mar. 2021 - Mar. 2022
Key Subjects: Australian Business Culture and Environment, Achieving Career Success, Australian Workplace Skills and Professional Business Communication

RMIT University (Distinction Achieved) — Mel, Australia
Master of Information Technology (Research Stream) — Jul. 2018 – Sept. 2020
Compared with a coursework degree, the research stream includes a three-credit project in the AI algorithm(**Machine Learning, Deep Learning and Reinforcement Learning**)-the related field with a higher quality thesis

Shanghai University of Engineering Science — Shanghai, China
Aviation Engineering of Bacholar — Sept. 2012 – Jul. 2016
Acquired the essential skills in the mechanism engineer with a solid mathematical foundation and principle of automatic control, including *VB Programming Design, Automatic Control Theory, Principles of Database, Linear Algebra, Probability Theory, and Single & Several-variable Calculus*

Reference References available on request