


Charles Zhang

charles.zh56@hotmail.com | +61490039398 | Sydney | linkedin.com/in/charles-zh | github.com/Char0r0

SUMMARY

A motivated and determined DevOps/Cloud/Platform Engineer with 8 years of experience across DevOps, Coding, IT project management, and data operations. Currently specializing in Kubernetes, infrastructure as code, CI/CD pipelines, and cloud-native. Hold an AWS Certified Solutions Architect – Associate and have hands-on experience with Pipelines, Docker and AWS. My commitment to streamlining deployment processes, combined with strong troubleshooting skills, has increased project efficiency and productivity.



CERTIFICATES

AWS Certified Solutions Architect – Associate  Amazon Web Services Training and Certification	Jul 2024
ITIL®4 Foundation PeopleCert	Mar 2024

SKILLS

- **Cloud Services:**
 - **AWS:** EKS, ECS, EC2, ECR, S3, Elastic Beanstalk, RDS, DynamoDB, NLB/ALB, VPC, Route 53, CloudFront, Net Gateway, API Gateway, SNS, SQS, Lambda, IAM, KMS, parameter store, CloudWatch, AMG, Elasticsearch Service (Logging), CodeCommit
 - **Azure:** VMs, App Services, ACI, AKS, SQL Database, Blob Storage, Data Lake Storage, VNet, Load Balancer, Active Directory, Role-Based Access Control, Azure Monitor, Azure DevOps, Azure Log Analytics
- **CI/CD:** Jenkins, Bitbucket Pipelines, Travis CI, GitHub Action, Azure DevOps, Atlassian Bamboo
- **CM/Automation:** Terraform, Ansible, Cloud Formation
- **Containerisation & Orchestration:** Docker, Kubernetes
- **SCM(Source Code Management):** Git, Bitbucket, GitHub, GitLab
- **Monitoring and Logging:** CloudWatch, Grafana, Prometheus
- **Databases/Cache:** MSSQL (2016/2019/2022), PostgreSQL, RDS, MySQL8.0, MongoDB
- **OS:** Ubuntu(20.04/22.04), Amazon Linux, Mac OS and Windows(7, 10, 11), VMware
- **Web Servers/Proxy:** Nginx, Apache and Tomcat
- **Scripting Languages:** Bash, Yaml, Json, Python, PowerShell, SQL
- **Network:** Ping, Tracert, My Traceroute (MTR), WAN, LAN, VLAN, HTTP, HTTPS, DNS, TCP/IP, DHCP, ARP
- **Data Analytics and BI:** Python (pandas, NumPy), R, SPSS, Tableau, Power BI
- **Project Management:** Agile Methodology, Scrum, Microsoft Office 365, Active Directory, Kanban, Jira, Slack, Business Analysis, Requirement MS Project

WORK EXPERIENCE

DevOps Engineer Async  Meetly Collaboration Platform Link: https://www.getmeetly.com/  Description: The core of this project is to develop a streamlined meeting scheduling and collaboration platform. Users can efficiently discover meeting times, create new meetings, share booking links, and synchronize multiple calendars in one place. Worked in a team of 8 software engineers, 8 DevOps engineers, and 1 BA. This project follows Agile development principles, participated in sprint planning, utilized Jira for task tracking, and used Bitbucket as a version control. Key Responsibilities <ul style="list-style-type: none">• Implementing DevOps best practices for infrastructure as code, automated CI/CD, and proactive monitoring to ensure the reliability, scalability, and security of a web application deployed on AWS and Azure• The front end, built with React, was deployed on AWS S3 for cost-effective static hosting. The backend developed with Nest.js was containerized and deployed on AWS ECS and EKS for scalable and high availability.• Using Jenkins, Bitbucket Pipeline, and GitHub Action to build, configure and maintain CI/CD pipelines to improve Integration and delivery efficiency• Building and managing infrastructure automation solutions on AWS with Terraform and Ansible, tracking its infrastructure's modification through version control systems to ensure efficient, auditable and reproducible infrastructure changes• Storing Terraform state files in an S3 bucket and configured DynamoDB for state file locking to ensure consistency and prevent conflicts during concurrent infrastructure changes• Managing database migrations for the PostgreSQL database hosted on AWS RDS using Prisma's migration tool, ensuring seamless schema evolution as application requirements changed• Setting up and managing robust monitoring solutions using Cloudwatch, Grafana and Prometheus to track system health, develop alerts, and maintain dashboards to support real-time and historical application performance analysis across diverse environments• Configuring users, roles, permissions, and policies in AWS IAM and OIDC based on the principle of Least Privilege, aligning team member permissions with project requirements, and periodically resetting permissions• Setting up AWS CloudFront as a Content Delivery Network (CDN) to reduce latency and improve load times for global users by caching content closer to user locations• Creating and managing task definition and services on AWS ECS with Fargate, ensuring efficient resource management and scalability• Implemented ECS auto-scaling policies to dynamically adjust the number of tasks based on traffic, ensuring the application could handle varying workloads while maintaining high availability	Mar 2024 – present Sydney, Australia
--	---

- Deploying and managing **Kubernetes** clusters on **AKS/EKS** to support scalable infrastructure, implementing auto-scaling policies to dynamically handle workload variations and maintain application availability
- Optimising application deployment pipelines for **EKS**, ensuring smooth and efficient deployments based on container image versions, automating version control and enabling quick rollback to previous versions when necessary, maintaining application stability
- Implemented a security strategy by managing sensitive variables through **Bitbucket Pipeline** environment variables and **AWS Parameter Store**, ensuring secure access control and preventing exposure of confidential information
- Followed **agile methodologies**, participating in sprints, daily stand-ups, and retrospectives, contributing to iterative development and continuous improvement of the project
- Maintaining comprehensive documentation, establishing best practices, and creating guides for infrastructure management, troubleshooting, and automation to streamline workflows and enhance team productivity

Spatial Data Controller

Anditi Pty Ltd (<https://www.anditi.com>)

Aug 2023 – May 2024
Newcastle, Australia

- Participated in a road safety analysis project by annotating image data according to the International Road Assessment Programme (iRAP) using GIS tools, including LiDAR and 360-degree imagery
- Processed and managed spatial datasets within QGIS and custom tools, performing meticulous data input and quality control to achieve a 98% accuracy rate, ensuring reliable data for spatial analysis and decision-making
- Automated repetitive workflows and optimized data processing tasks within GIS platforms, reducing task completion time by 10% and enhancing overall operational efficiency
- Conducted rigorous dataset audits and validation checks, ensuring spatial data quality, completeness, and readiness for project applications
- Collaborated with cross-functional teams, including engineers, planners, and project managers, to seamlessly integrate spatial data into project planning, decision-making, and reporting processes, enabling more informed infrastructure development

IT System Administrator

ZZ International (<https://www.zzgj.com>)

Aug 2019 – Jun 2022

- Helped the Project Manager with the entire project life cycle on five major projects ranging from \$100,000 to \$1 million in budget
- In the e-commerce platform development projects, set up and maintained CI/CD pipelines using Jenkins to automate testing and deployment
- Assisted in planning, documenting, tracking and reporting project progress using project management tools, such as Microsoft Project and Jira
- Coordinated project meetings with teams and stakeholders to ensure transparent, clear and effective communication
- Managed vendor relationships to procure high-quality hardware and software, including Aruba, Room Control Unit, and Opera PMS, negotiating up to 10% procurement cost reduction
- Implemented the required quality assurance processes to ensure the deliverables meet legal and regulatory standards

IT Support Specialist

ZZ International (<https://www.zzgj.com>)

Aug 2016 – Aug 2019

- Managed the lifecycle of hardware and software, including procurement, installation, configuration, maintenance and repair
- Performed diagnosis and troubleshooting across Windows Server, VMware, Active Directory, hardware (desktop, laptops, servers), software and network
- Administered Active Directory, managing user accounts, permissions, group policies, and access control, ensuring compliance with organizational standards and security policies
- Configured, monitored, and optimized LAN, VLAN and WAN networks, performing network performance assessments, segmentation, and upgrading hardware such as routers, switches, and firewalls to improve connectivity and reliability
- Performed network troubleshooting using tools such as Ping, Tracert, and MTR (My Traceroute), resolving connectivity issues and optimizing bandwidth usage to ensure a stable and secure network system
- Automated routine administrative tasks using Bash and PowerShell scripts, such as system updates, log management, and scheduled backups, enhancing efficiency and reducing manual workload
- Collaborated with external vendors to manage the deployment of new IT infrastructure projects, including server migrations and VPN implementations, to ensure a reliable and efficient system
- Delivered both onsite and remote support and technical training to end-users, empowering users and promoting ITIL best practices to reduce recurring issues and improve productivity
- Maintained comprehensive documentation of IT issues and resolutions in a ticketing system, generating detailed reports and developing user manuals and training materials to enhance knowledge sharing and user autonomy

EDUCATION

Master of Information Technology with Distinction

University of Newcastle

GPA: 6.3 / 7.0

FEBE International Engineering and Technology Postgraduate Coursework Scholarship

Aug 2021 – Aug 2023
Newcastle, Australia

Bachelor of Business Management [Hons]

Teesside University

Jul 2013 – Jul 2016
Middlesbrough, U.K.

Bachelor of Computer and Application

Henan University of Science and Technology

Sep 2009 – Jun 2013
China