Charles Zhang

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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, ECR, EC2, S3, ECS, Elastic Beanstalk, RDS, DynamoDB, Aurora, ELB, VPC, Route 53, CloudFront, SNS, SQS, Lambda, IAM, KMS, parameter store, Elasticsearch Service, CloudWatch, 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:** Bitbucket Pipelines, Jenkins, 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(18.04/20.04), Amazon Linux, Mac OS and Windows(7, 10, 11)
- **Web Servers/Proxy:** Nginx, Apache and Tomcat
- **Scripting:** Bash, Yaml, Json, Python3, PowerShell, SQL
- **Network Protocol:** HTTP, HTTPS, DNS, TCP/IP, DHCP, ARP
- **Data Analytics and BI:** Python (pandas, NumPy), R, SPSS, Tableau, Power BI
- **Project Management:** Agile Methodology, Scrum, Kanban, Jira, Slack, Business Analysis, Requirement MS Project

WORK EXPERIENCE

DevOps Engineer
Ausync 🔗

Mar 2024 – present
Sydney, Australia

- Developing a web-based application prototype on Azure and AWS using VUE.js, React, C#, and Node.js, building a dynamic and user-friendly interface with robust backend services
- Setting up IAM users for team members, assigning appropriate permissions through groups to ensure secure access to cloud resources
- Configuring AWS VPC with Internet Gateway, ALB, NAT Gateway, Elastic IPs, and route tables to design a secure and scalable network architecture, optimising public and private subnet configurations to meet the project's needs
- Deploying and managing Kubernetes clusters using AWS EKS, ensuring the scalability and high availability of the application infrastructure, while implementing auto-scaling strategies to handle fluctuating workloads efficiently
- 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.
- Utilising Terraform to maintain and provision frontend and backend infrastructure, deploying and updating resources through GitHub Action and Bitbucket Pipelines, ensuring automated and efficient resource management
- Performing unit and integration testing using frameworks like Jest and NUnit to validate code quality and functionality, identifying and resolving issues early in the development process

- Utilising Prometheus, AWS CloudWatch, and Grafana to monitor backend servers based on the four golden signals, setting up alarms for metrics like error rate, Route 53 health checks, ALB 4xx/5xx errors, ALB response time, and container CPU usage, ensuring proactive issue detection and resolution
- Meeting project requirements (Meetly ⬀) and communicating regularly with stakeholders to provide progress updates, ensuring alignment and meeting project deadlines

Spatial Data Officer
Anditi Pty Ltd

Aug 2023 – May 2024
Newcastle, Australia

- Used QGIS and maintained spatial datasets (LiDAR and 360-degree imagery) to meet the needs of WA Main Roads Data input to a high degree of accuracy
- Resolved data conflicts logically and consistently
- Collaborated with cross-functional teams to integrate spatial data into project planning and decision-making processes

IT Project Administrator
Zhongzhou International Group

Aug 2019 – Jun 2022
Zhengzhou, China

- 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
Zhongzhou International Group

Aug 2016 – Aug 2019
Zhengzhou, China

- Managed the entire lifecycle of hardware and software, including procurement, installation, configuration, maintenance and repair
- Performed diagnosis and troubleshooting, including OS, hardware (desktop, laptops, servers), software and network
- Performed LAN optimisation, including performance assessment, network segmentation and hardware updating and upgrading
- Created and Maintained Bash scripts to automate routine tasks such as system updates, backups, and log management, improving operational efficiency
- Collaborated with external service vendors on projects to ensure a reliable and efficient infrastructure system
- Delivered onsite and remote support and training to end-users
- Documented IT issues solutions in the ticketing system and prepared reports, user manuals and user training

EDUCATION

Master of Information Technology with Distinction
University of Newcastle
GPA: 6.3 / 7.0

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