RICHA LIZ THOMAS

Site Reliability Engineer

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OBJECTIVE

Over 4+ years of experience managing infrastructure, with a strong focus on Kubernetes cluster management, Linux automation, containerized workloads, and CI/CD pipelines. Certified Kubernetes Administrator (CKA) with a master's degree in computer science. Successfully minimized flight server downtimes through effective solutions in production-critical aviation systems. Canadian Permanent Resident with experience supporting critical production environments for global teams.

TECHNICAL SKILLS

- Automation and Management Tools: **Terraform, GitHub Actions (CI/CD), GitHub**
- Containers & Orchestration: **Kubernetes, Docker, Helm, ArgoCD**
- Monitoring & Observability: **EFK Stack, Prometheus, Grafana, ServiceNow**
- Operating Systems: **Red Hat Linux, Ubuntu**
- Scripting & Programming: **Bash Scripting, Python, C programming**
- Cloud Technologies: **AWS, Azure**

EXPERIENCES

Site Reliability Engineer / Senior Systems Engineer

Tata Consultancy Services (TCS)   **April 2024 – April 2025**

- Automated AWS infrastructure provisioning using Terraform modules, including creating and managing EC2, VPC, S3, Security Group and IAM user accounts, ensuring consistent deployments.
- Implemented CloudWatch monitoring by uploading custom log files, creating alarms for EC2 instance metrics, and configuring SNS notifications for proactive alerting.
- Managed Kubernetes clusters with (50+ nodes and 100+ applications) for critical aviation systems, ensuring 97% uptime during peak travel seasons.
- Troubleshot complex Kubernetes issues, including crash-looping pods, gateway issues, and failed deployments, using network policy, reducing resolution times by 40% in production environments.

Systems Engineer

Tata Consultancy Services (TCS) - India   **April 2021 – March 2024**

- Managed Kubernetes clusters, including kubeadm installs/upgrades, and node maintenance to ensure high availability.
- Customized CI/CD pipelines to automate builds, tests, and code validation, optimizing job execution with shared runners for better performance and scalability.
- Created Bash scripts for enhancing efficiency in log rotation, filesystem monitoring, and disk space monitoring.

- Led an 11-member team for drop patching, Linux server migration from satellite 5 to 6 and RHEV-M upgrades across Linux-based production, test, and development environments to ensure security compliance.
- Provided Level 3 on-call and 24/7 support for RedHat Linux servers in physical, virtual, on production environments, ensuring high availability.
- Deployed the EFK stack in Kubernetes using TLS, RBAC, and Network Policies, while restricting access to Elasticsearch and Kibana and enabling secure log shipping with Fluentd.
- Handled Linux storage infrastructure, including LUN provisioning, NFS and filesystem management, cluster administration, and data migration from on-prem to cloud.
- Managed network settings, including IP addressing, firewall configurations, and DNS/LDAP for communication and directory services on RedHat Linux servers.
- Optimized troubleshooting, incident, and problem management, reducing tickets from 130 to 50 per week and resolving 99% of tickets within SLA using ServiceNow for the Linux environment.

EDUCATION

- **Master of Technology | Computer Science and Engineering | 2018 – 2020**
  APJ Abdul Kalam Technological University, India | CGPA: 8.9/10
- **Bachelor of Technology | Computer Science and Engineering | 2014 - 2018**
  Mahatma Gandhi University, India | CGPA: 8.27/10

CERTIFICATIONS

- **Certified Kubernetes Administrator – CKA** | Valid: June 2025 – June 2027
- **HashiCorp Cloud Engineer – Terraform Associate** | Valid: Nov 2024 – Nov 2026
- **AWS Certified Solutions Architect – Associate** | Valid: Sept 2024 – Sept 2027
- **TCS SSA – E2 Linux Administrator** | Issued: Feb 2024 (no expiry)

TECHNICAL PROJECTS

- **Web App with DevOps Automation -** [Project Link](Project%20Link)
  DevOps workflow for a Go web app using Kubernetes, Helm, Docker, ArgoCD, GitHub Actions, and AWS IAM.
- **AWS_EKS_DEPLOY -** [Project Link](Project%20Link)
  Deployed a web app on AWS EKS using Helm, Ingress, and IAM roles.

ACHIEVEMENTS

- Three On-the-Spot Award at TCS for problem-solving in infrastructure projects.
- TCS Best Team Award for leading the coordination and execution of critical infrastructure automation and migration projects.