Joshua Amrik Singh

Summary

Experienced Site Reliability Engineer with over 10 years in system administration, automation, and incident management. Proven track record in optimizing system reliability and performance at global scale organizations like Amazon and Apple. Certified Kubernetes Administrator with deep expertise in AWS, Linux, and various cloud technologies.

Skills

Site Reliability Engineering & System Administration:

System Automation, Incident Management, Hardware and Software Troubleshooting, Network Administration, Virtualization, Cloud Computing, Data Backup, System Monitoring and Alerting, Documentation Development, Training **Development and Leadership**

Tools & Technologies:

AWS: EC2; ElastiCache; EBS; CloudWatch; IAM, Mesos, Prometheus, Puppet, Docker, SaltStack, Redis, Splunk, Kubernetes, Graphite, Grafana, GitHub Enterprise, Gitlab, git, Ansible, Terraform, Proxmox

Programming Languages:

Python (Proficient), Bash/Zsh (Proficient), Java (Intermediate), Go (Beginner), Ruby (Beginner), C (Beginner)

Certifications

Certified Kubernetes Administrator (CKA) - The Linux Foundation

Experience

Amazon Web Services

Cloud Support Engineer — Linux

- Delivered industry leading support for customers utilizing AWS services such as EC2, EBS, and ElastiCache.
- Engineered automation tools, reducing manual processes from over 10 minutes to under 1 minute using Python.
- Executed on-call duties, managing service escalations, and implementing quality improvement initiatives.
- Enhanced internal training materials, leading sessions for new hires and leadership, improving overall team capability.

Apple

Siri Production Engineering

- Deployed and maintained global server fleets supporting Siri; ensured 99.99% uptime and optimized performance.
- Participated in on-call for globally distributed services, approved code releases, and coordinated traffic management.
- Supervised a continent-scale outage where I remediated customer impact within 15 minutes and took lead of the root cause analysis as well as post mortem action items.
- Automated complex manual tasks from over 7 hours to under 2 hours, significantly improving operator efficiency.
- · Authored and maintained documentation for internal services, defining support channels and SLAs to streamline developer support.

Siri Dev Ops Intern

• Developed a system for real-time global server state reporting, improving visibility and monitoring.

- Collaborated with cross-functional teams at Apple to enhance knowledge of server infrastructure.
- Improved monitoring and logging platform usage and automation processes.

WITR 89.7

Chief Engineer

- Directed a team of volunteers and employees to maintain high reliability for RIT's radio station operations.
- Reconstructed core services to enhance system resiliency and failover capabilities.
- Designed and executed the construction of a \$250,000 broadcast studio while integrating industry standards.
- Implemented automation and monitoring for 24x7 radio broadcasts to ensure uninterrupted service.

Staff Engineer

- Assisted in maintenance and rebuilding of the radio station's core services to improve overall system reliability.
- Integrated older systems with SaltStack and CobblerD for improved control and automation.
- Initiated a comprehensive monitoring system for the entire infrastructure, laying the groundwork for future enhancements.

05/2014 - 12/2015

01/2016 - 05/2017

01/2018 - 09/2019

01/2017 - 08/2017

03/2020 - 09/2023

04/2024

2013 - 2018