[Redacted], Site Reliability Engineer

Contact info: Redacted in publicly posted CV, posted with contact open – contact with job details if a full unredacted version is needed.
Pronouns: she/her or they/them

Highlights

Site Reliability Engineer with strong Linux and enterprise networking background, experienced primarily with AWS and GCP cloud environments, Kubernetes, and in automation, infrastructure deployment and monitoring, and security.

US permanent resident with full eligibility for employment with no sponsorship requirements.

Experienced remote worker since 2015; also willing to relocate to: Portland OR, Seattle WA, SF Bay Area, Chicago IL, Denver CO, New York City, Minneapolis MN, Boston MA. Others may be negotiable.

Experience

Sr. Site Reliability Engineer, [REDACTED]   July 2022 – July 2024

- Deployed security and EDR tools across cloud environments, migration of GKE clusters to private networks and of services to GCP Private Service Connect, in order to improve application security posture
- Deployed of best-practice security configuration organization-wide based on EDR tooling (CrowdStrike) and reports from security team
- Deployed production infrastructure using Terraform; migrated of legacy infrastructure into Terraform and migration of existing ad-hoc config to Terraform modules to improve standardization of infrastructure
- Both standard on call and security-specific incident response working closely with security team to cover security-related infrastructure issues
- Collaborated with compliance team to improve audit processes, including documentation of system design
- Migrated 600+TB MySQL databases from self-managed static VM infrastructure to CloudSQL
- Implemented static analysis tooling in CI environment to improve application security
- Managed infrastructure using IaC tools (Terraform), including Terraform version upgrades, importing hand-configured infrastructure into Terraform state and modularizing configuration

Co-founder & Chief Technical Officer, [REDACTED]   2023 – 2024

- Co-founder, CTO, and seed round investor in a biotechnology startup
- Specified and planned platform for genome research and drug development, leveraging machine learning as well as providing tools to accelerate processes of compliance and approval

Site Reliability Engineer, [REDACTED]   October 2020 – July 2022

- Managed AWS-based infrastructure including legacy codebase on EC2 with autoscaling groups, migration from instances built with Chef to pre-built AMIs linked to Gitlab CI/CD pipeline and to Kubernetes-based microservice architecture
- Managed EKS-based microservice infrastructure
- Assessed security vulnerabilities, patched infrastructure in-place and automated build and deployment based on security scanning, performed Linux security hardening, and incident response
- Deployed infrastructure using Terraform
- Responsible for on-call incident response
- Represented LGBTQIA+ employees, raising issues and concerns to senior management as Pride ERG board member

Site Reliability Engineer, [REDACTED]   September 2015 - October 2020

- Managed multiple Kubernetes clusters running on AWS hosting microservice-based APIs
- Migration from legacy (2.x) ELK stack used at a small scale for application-specific state to a scalable solution on a current version of ElasticSearch handling a mixture of application-level state storage and high-volume application log traffic from Kubernetes clusters for monitoring and analysis purposes.
- Replaced ad-hoc solutions for monitoring and reporting with centralized Kibana infrastructure and enabled access to application logs for development teams to improve observability
- Migrated monolithic services from multiple infrastructure platforms (primarily manually provisioned Docker containers and AWS Elastic Beanstalk) to a mix of Kubernetes-hosted and AWS managed services.
- Managed multiple Cassandra clusters hosting large datasets (100TB+)
- Saved $25,000/yr by migrating from commercially-licensed InfluxDB to open-source while retaining high

availability via implementing a system for distribution of collected data via RabbitMQ. Centralized collection and visibility of key application metrics
- Replaced static host-based monitoring with dynamic service-based monitoring using Sensu, during migration to a host-agnostic infrastructure model within Kubernetes.
- Streamlined and expanded Continuous Integration development workflow
- Responsible for on-call incident response for infrastructure issues and escalation as needed

Senior Systems Administrator, **[REDACTED]**   October 2013 - September 2015
- Lead systems and network administrator for a high availability application cluster supporting more than 1000 UK schools. Virtualized infrastructure on colocated hardware with internal and external BGP and Ceph, MySQL and PostgreSQL services.
- Responsible for the planning of future infrastructure expansion, its installation and maintenance, configuration using configuration management systems, and monitoring.
- Responsible for issues escalated by support team
- Improved monitoring and statistic gathering systems, to ensure the stability and performance of BGP peering links
- Configured new network expansion in the datacenter and office, migrating service providers without downtime and upgrading of office network infrastructure.
- Reported potential future areas for concern and ensured these were planned for, while responding to operational requirements and automating routine tasks.

Linux Systems Administrator, **[REDACTED]**   November 2012 – October 2013
- Responsible for network, database and application administration tasks including the administration of a network of production servers with very large email and DNS infrastructures and numerous independent sharded MySQL servers and development environments, the configuration and maintenance of infrastructure and services and internal systems support for the company by performing advanced routine and non-routine administrative and 3rd level support tasks, troubleshooting application and system issues and improved application metrics collection and storage
- Implemented a system to monitor, notify, and collect statistical data to analyze problems and find potential limitations or areas for improvement, standardized server estate, created and maintained scripts for production environment and administration, and identified potential issues for corrective action or escalation to development teams.
- Supported internal and external customers with the customer service teams

External Projects

[REDACTED]   Feb 2024 – Present
- Co-founder and COO of SEC-registered investment advisory firm
- Founded as a passion project between myself and a close friend (formerly co-founder of [REDACTED]); started as a method for managing our personal investments, before expanding to a broader scope with a family of funds for diverse investment strategies with a strong focus on fundamental value and companies with very strong ESG principles
- Performing analysis of macroeconomic conditions and individual equities to determine investment strategy for the family of funds operated by the Group

Education
2008 – 2011   BSc (Hons) Computer Science; [REDACTED].

Tools and Skills
Software
- Kubernetes (bare metal, EKS, and GKE)
- Docker
- Terraform

Databases
- Cassandra, DynamoDB, PostgreSQL, MySQL, Aurora, Google Cloud SQL

CI/CD
- Atlassian, GitLab, GitHub, Jenkins, ArgoCD

Configuration management
- Puppet, Salt, Chef

Message queue systems
- RabbitMQ, ActiveMQ

Monitoring and observability
- Datadog, Grafana, Prometheus, InfluxDB, ElasticSearch, OpenSearch, ELK

Linux
- Debian, Ubuntu, CentOS, RHEL, Alpine, general Linux performance tuning/automation

Cloud
- **AWS**: EC2, VPC, RDS (PostgreSQL, Aurora), IAM, Cognito, Lambda, S3, Route 53, ElastiCache, CloudWatch, OpenSearch, EKS, ECR, IAM
- **GCP**: GKE, GCS, load balancing, IAM, Private Service Connect, Cloud SQL

Email
- Postfix, Exim, PowerMTA, email deliverability and authentication mechanisms (DKIM/SPF/DMARC), anti-spam, overall excellent understanding of email deliverability and security principles

Development
- Extensive skill in shell scripting and Linux automation. Capable of working in Python, C, and Golang, some knowledge of Ruby and PowerShell

Network
- Network design and management at the logical and physical levels for both cloud and on-site infrastructure. Use of BGP in a small AS environment.

Hardware
- Physical network infrastructure and datacenter environments

Security
- Configuration best practices, monitoring, EDR (CrowdStrike), incident response, red team

Other Skills, Interests, and Activities

- Contributor to open source firmware and hardware projects (estimated to be included in ~50 currently commercially available products from 6+ companies, including providing implementation support for commercial users as a project maintainer)
- Advocate for LGBTQ+ people facing mistreatment from healthcare providers
- Technology reviewer, focusing primarily on data-driven in-depth testing of electronics

References available on request.