

# Ricardo Herrera

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## CORE TECHNOLOGIES

Kubernetes (Cluster API) • AWS (EKS) • Terraform • Ansible • GitOps • Prometheus/Grafana • Docker • Harbor • Go

## EXPERIENCE

### Senior Site Reliability Engineer | Watchtower | Patterson, NY | September 2018 - Present

- Built and operate enterprise Kubernetes platform (10 clusters, 140 nodes, 1700+ pods) using Cluster API, serving 10 development teams with self-service infrastructure and 20+ daily deployments.
- Designed developer-facing platform with database operators (Redis, PostgreSQL) and standardized CI/CD pipelines, eliminating ticket-based provisioning and reducing infrastructure delivery from days to minutes.
- Implemented comprehensive observability stack (Prometheus, Grafana, Loki, Thanos) for Kubernetes and supporting infrastructure with 5-year retention and multi-cluster federation, replacing legacy monitoring with 2-week retention.
- Automated private cloud infrastructure provisioning using Terraform and Ansible, reducing deployment time from weeks to 30-60 minutes and eliminating manual error-prone processes.
- Established SLI/SLO framework achieving 99.95% availability for 1200+ VM platform with quarterly reviews and error budget-driven maintenance planning.
- Developed engineers from junior to senior responsibilities, enabling independent infrastructure provisioning via GitOps and operational autonomy across the Kubernetes platform.
- Designed centralized configuration management platform using AWX managing 500+ Linux VMs with GitOps-driven desired state configuration, eliminating configuration drift and reducing remediation time from hours to minutes.
- Architect and operate global VMware infrastructure spanning 3 datacenters across different regions, managing 1200+ VMs with distributed vCenter deployment and site-specific resource pools.
- Led incident response and on-call rotation, reducing MTTR by 30% through automated runbooks and improved observability.

### Senior Site Reliability Engineer (Consulting) | G&G Outfitters | Remote | April 2022 - Present

- Architect and operate production Kubernetes infrastructure on AWS EKS managing 620+ pods across 4 clusters with 99.99% uptime and 4-5 zero-downtime deployments daily.
- Reduced infrastructure costs 60%+ by migrating from Expedient to AWS, implementing Karpenter autoscaling with spot instances while improving reliability.
- Scaled infrastructure to support 5x e-commerce traffic growth while maintaining \$5K monthly AWS spend through cost optimization and elastic autoscaling.
- Optimized CI/CD pipelines enabling rapid deployment cycles across distributed services with Docker build caching and automation improvements, migrating from legacy Jenkins platform to modern GitHub Actions.
- Built self-service observability platform in Kubernetes using Prometheus Grafana, and Loki, enabling development teams to independently monitor services, create dashboards, and troubleshoot issues through centralized portals in each cluster.
- Deployed Harbor registry with vulnerability scanning serving hundreds of daily pulls, preventing Docker Hub rate limits and securing supply chain.
- Implemented declarative EKS infrastructure with Terraform managing 3 production clusters, reducing cluster upgrades from 2-3 days of manual toil to 60-minute automated deployments via GitOps, eliminating upgrade-related downtime and risk.

### Infrastructure Engineer | Olo | Remote | April 2017 - August 2018

- Built developer-facing infrastructure platform enabling development and QA teams to provision production-replica environments on-demand, reducing environment setup from 2-3 days to 15 minutes and eliminating infrastructure bottlenecks for 30+ developers.
- Designed Terraform-based infrastructure-as-code solution with reusable modules for multi-environment AWS deployments, implementing security isolation patterns and automated networking configuration while maintaining compliance across dev, QA, and production environments.
- Managed high-velocity CI/CD platform on TeamCity supporting 50+ daily builds and multiple production deployments, achieving 95%+ deployment success rate through automated testing gates and rollback capabilities for Olo's restaurant ordering platform.
- Automated infrastructure operations using Ansible playbooks, eliminating 15+ hours/week of manual server configuration tasks and ensuring consistent state management across 100+ EC2 instances.
- Operated production and staging AWS environments for enterprise restaurant ordering platform serving national chains, managing automated deployments and infrastructure reliability for order processing services across development, QA, and production environments.

## **System Administrator | WSOL | Aurora, IL | October 2013 - April 2017**

- Managed production VMware infrastructure in colocated data center, administering 5-10 ESXi hosts, vCenter, and Dell Compellent storage arrays (4TB capacity) supporting 200+ virtual machines for CMS clients.
- Operated Dell Compellent SAN infrastructure including volume provisioning, tiered storage optimization, and performance tuning, ensuring 99.9%+ uptime for production CMS workloads serving multiple client deployments.
- Led AWS cloud migration initiative driven by scalability and elasticity requirements, architecting infrastructure-as-code solution with Terraform for resource provisioning, Packer for automated AMI builds, and Chef for configuration management across multi-client environments.
- Automated server provisioning and configuration management using Chef cookbooks, reducing deployment time from hours to minutes and ensuring consistent state across 50+ instances supporting HubSpot-integrated CMS solutions.
- Maintained backup and disaster recovery systems for client CMS platforms, implementing automated backup policies and recovery procedures that reduced RTO from 4+ hours to under 30 minutes.

## **EDUCATION**

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**Bachelor of Computer Systems Engineering | UCI | Mexico City, Mexico | 2011**

## **SKILLS & TECHNOLOGIES**

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**Languages:** Go, Python, Bash

**Cloud:** AWS (EKS, EC2, RDS)

**Kubernetes:** Cluster API, Operators (Redis, PostgreSQL)

**Infrastructure as Code:** Terraform, Ansible, FluxCD, Carvel (kapp, ytt, kbl)

**Observability:** Prometheus, Grafana, Thanos, Loki, Tempo

**CI/CD:** GitOps, GitHub Actions, GitLab CI

**OS:** Linux (Ubuntu, RedHat)

**Container Registry:** Harbor

**Platform Engineering:** Self-service tooling, developer experience (DevEx), internal portals