

Jo Rhett

San Jose, CA

<https://www.linkedin.com/in/jorhett/>

<https://github.com/jorhett/>

SUMMARY:

I help engineers. I create tools that make it easier to validate, release, and observe their deployment. I design security-conscious platform services that minimize risk and magnify observability. I bring 33 years of hands-on experience creating, automating, and evolving large-scale Internet services.

- Automate self-healing infrastructure with Kubernetes, AWS, GCP, Azure, and VMware
- Implement configuration management alongside CI/CD and release orchestration tools
- Create and improve security, network, and datacenter management tools in Python, Ruby, Go
- Document APIs, tools, and internal standards to accelerate self-help
- Maintain Ubuntu, CentOS/Red Hat, and FreeBSD nodes

WRITING:

I am an author of practical technology books:

- **Puppet Best Practices** published Sept 2018 by O'Reilly
- **Learning Puppet 4** published April 2016 by O'Reilly
- **Learning MCollective** published August 2014 by O'Reilly
- **Instant Puppet 3 Starter** published March 2013 by Packt



EXPERIENCE:

Tubi.tv: Staff Security Engineer

2020 – Current

Improve in-house Terraform and Ansible infra tools to evolve startup infrastructure to secure, observable, auditable platform services. Design an RBAC secrets management system around Hashicorp Vault. Replace diverse authentication practices with Okta SSO authentication.

Create a DevSecOps process to provide guidance during development and testing. Institute new implementation documentation standards for each service. Develop workflows for automated review using tools from Wiz, OX Security, AWS, and FOSS tools that provide engineering teams instant feedback without waiting for manual review or approvals.

Build a security team by training and mentoring existing engineers. Provide IaC code review, deployment guides, and ongoing security and deployment training to all of engineering.

Migrate from trusted bastion access to a per-application-authorized Zero-Trust access via Tailscale. Create automation to update connector nodes and deploy access policy changes from Okta.

Collaborate with IT and InfoSec teams of our parent company to ensure we align, comply with, and often lead the way on InfoSec and enterprise standards and priorities.

Consulting & Short-term Engagements:

2004 - 2020

Box: Staff Site Reliability Engineer

Built Puppet infrastructure and CI workflows to automate testing and code promotion for 40,000 nodes and dozens of teams spread across OpenStack, AWS, GCP, and geo-located data centers.

Humana: Machine Learning CI/CD in Kubernetes

Designed ML CD pipeline on modern Kubernetes / Jenkins / Helm best practices. Contributed significant features to Puppet's officially supported Kubernetes module.

23andMe: GDPR-compliance Security Automation

Extracted service access from CloudFormation templates for automated approval and audit. Evaluated changes observed in AWS Config and Cloudtrail to remediate or alert with Lambdas.

Significantly greater detail is available in the hypertext version.

<https://devops.jorhett.com/Resume/JoRhett.html>

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Palo Alto Networks: Principle Site Reliability Engineer

Created a CI/CD pipeline using Terraform, Ansible, Helm, and direct API calls to automate GCP compute, network, and IAM infrastructure in declarative Jenkins Pipeline Steps. Facilitated consensus-based integration of distributed multi-team efforts that built on the shared framework.

Nuance: Senior Manager / Principle Automation Engineer

Managed Tools & Automation engineering team for Nuance. Migrated team to Agile Scrum practices, created roadmap, built trust in our delivery. Designed platform tools for seamless deployments in Kubernetes. Created custom Puppet types and providers for Azure API provisioning.

Quixey: Principle Engineer

Improved and automated Jenkins CI/CD on an AWS / datacenter hybrid cloud. Migrated live services from Mesos to Docker Swarm to provide seamless service upgrade and rollback.

Ooyala: Site Reliability Engineer

Automated deployments with a Chef Automate Workflow release pipeline on a multi-region AWS / Openstack hybrid cloud. Designed auto-registration and self-healing functionality to minimize on-call support. Provided weekly developer training sessions on Chef best practices.

Chegg: Senior DevOps Engineer

Architected a build-on-demand development and release environment in AWS using Chef to provide for extreme scaling capabilities. Created change management tools to simplify and audit deployment, tracking, and scaling needs. Created a multi-level data architecture that extends Chef attribute precedence for RBAC-controlled, multi-team data management.

StubHub! (eBay): Senior Operations Architect

Shepherded technology projects for dozens of development teams from concept to deployment. Customized Akamai to enhance performance for interactive application response. Strategized redesign and build CI/CD tools for a development environment with more than 6,000 VMware nodes.

Pinger: Principal Operations Engineer

2012 - 2013

Managed deployment 24x7 for the Textfree and Pinger applications, which service millions of concurrent users. Implemented Puppet automation of diverse global sites. Restructured the network to improve availability and security. Automated creation of application-specific data points in Zenoss.

Equinix: Senior Network OSS Tools Developer

2010 - 2011

Designed completely automated, vendor-agnostic, worldwide provisioning system for Equinix Carrier Ethernet Exchange. Created an automated customer self-help OAM and RFC-2544 testing system.

Silicon Valley Colocation: Network Engineer

2004 - 2009

Created customer & NOC webUI to track ports, cross connects, and power usage. Designed IP backbone and BGP peering to increase resilience. Implemented IPv6 routing and DNSSEC.

ISite Services: Chief Technology Officer

1999 - 2004

Managed engineering and operations of an application service provider with iterative release practices. Created tools for zero-downtime upgrades and self-help automation.

Visionary Management Technologies: Senior Network Engineer

1993 - 1999

Created firewalls and secure networks with Cisco, Juniper, and other routers, switches, and firewalls. Operated a multi-organization transparent proxy/firewall service.

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