

RYAN M. BOWLBY

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SUMMARY

A driven and passionate IT consultant with extensive experience working in fast moving engineering organizations. Dynamic, agile, and technically progressive, I'm always striving towards more resilient and automated infrastructure. Extensive experience architecting and implementing systems using IaaS and PaaS services such as AWS. Capable of maintaining a focus on the larger company success while driving technical projects to completion.

OBJECTIVE

To work in a Senior capacity in a fast paced and collaborative organization. To work as an active practitioner of the "DevOps" and "Infrastructure as Code" operations ideologies in a forward leaning company.

KEY SKILLS

- Kubernetes
 - Helm
 - Spinnaker
- Elasticity
 - AWS Autoscale Groups
 - AWS ECS
 - AWS Lifecycle Hooks
- Infrastructure Automation
 - Cloudformation
 - Terraform
 - Ansible
 - Boto / aws-sdk
- Continuous Integration & Deployment
 - Spinnaker
 - AWS Code Pipeline
 - Jenkins
 - Bamboo
 - Codeship
- Monitoring & Alerting
 - Prometheus
 - Cloud Watch
 - Nagios
 - Icinga
 - Pager Duty
- Scripting
 - Bash
 - Python
 - Ruby
- Systems Architecture
 - 12 Factor Methodologies
 - Service Oriented Architecture
 - Immutable and Ephemeral Infrastructure
 - Microservice Design
- Systems & Application Metrics
 - New Relic
 - Data Dog
 - Graphite & Statsd
 - Collectd
 - Ganglia
 - Munin
- Configuration Management
 - Chef
 - Puppet

WORK EXPERIENCE

Apple (Seattle)

December 2019 - Current

- Senior Site Reliability Engineer - iCloud Team
 - Worked as a key team member in the migration of our continuous integration platform to Spinnaker. Including pre-deployment health checks and automatic post-deploy functional testing and integration.
 - Lead the migration of one of our key iCloud services to Kubernetes. Made use of Helm for templating manifest changes and automating deployments. Final production implementation served over ten million users.
 - Worked on implementing best practices around service uptime within a Kubernetes environment. Increased fault tolerance by setting appropriate pod disruption budgets, and defining quality of service.
 - Application deployment responsibilities that include reliably deploying worldwide to millions of customers.

Gracenote (Emeryville, CA - Remote from Seattle)

December 2017 - December 2019

- Senior Devops Engineer - Devops Team
 - Designed and Implemented AWS security and cost compliance processes. Including automated deletion of unused resources, underutilized EC2 right-size candidates, tag compliance, and alerting on newly provisioned resources not meeting security criteria.

- Implemented centralized AWS security threat detection spanning a multitude of accounts. Made use of lambda to integrate Guard-duty with slack for real-time alerting.
- Led the effort to standardize continuous integration and deployment methodologies to kubernetes using Jenkins. Made use of Jenkins Blue Ocean with the Jenkins DSL. Documented CI/CD best practices that included pre-merge automated linting, testing, as well as automated post-merge and post-deploy integration testing.
- Implemented Ark as a comprehensive kubernetes backup solution for stateful sets; providing point-in-time service recovery that's application-agnostic.
- Architected a micro-caching reverse proxy solution using Nginx for NBC and other partners during the Olympic Games. A multi-region and highly-available cache that fronted our real-time (live coverage) sports stats APIs.

Reflektion Inc. (San Mateo, CA - Remote from Seattle)

January 2016 - December 2017

- Senior Devops Engineer - Devops Team
 - Lead the internal adoption of operations best practices related to immutable infrastructure, configuration management, infra-as-code. Including the migration from manually configured EC2 instances to immutable infrastructure (IaC). Work as the founding member within the DevOps team. Responsible for assessing and implementing new tools and technologies to automate and improve operational efficiency. Mentoring team members on these tools and ushering in a culture that embraces the "Infrastructure as Code" best practices.
 - Introduced wholistic management of AWS infrastructure using Terraform. This included the underlying VPC networking, zones, IAM policies, as well as base ec2 configuration.
 - Migrated the majority of production services to ECS using Codeship for fully automated continuous deployment on merge to master.
 - Created custom Terraform modules for provisioning new ECS clusters, services, task definitions.
 - Lead the migration from EC2 Classic to VPC using Terraform for programmatic and source controlled change.
 - Trained fellow operations staff and other teams on principles of Infrastructure as Code and Continuous Deployment.
 - Consulted with and advised the security team on security best practices within AWS, e.g. IAM policy management, security groups, use of EC2 roles in-place of static credentials, etc.

Clearslide Inc. (San Francisco, CA - Remote from Seattle)

August 2014 - January 2016

- Senior Site Reliability Engineer - Devops Team
 - Work as the founding member within the DevOps team. Responsible for assessing and implementing new tools and technologies to automate and improve operational efficiency. Mentoring team members on these tools and ushering in a culture that embraces the "Infrastructure as Code" best practices.
 - Lead the migration of existing services from collocated to AWS. Refactored existing services for AWS, allowing for ephemeral instances and elasticity using autoscale. Used Cloudformation and later Terraform to manage AWS service stacks.
 - Implemented Chef, including designing and documenting best practices, developing cookbooks, and automating cookbook CI/CD. Made use of Jenkins for cookbook CI, rubocop and foodcritic for style and linting, thor for versioning, berkshelf for dependency management, and serverspec for testing within test-kitchen.
 - Implemented continuous deployment for existing services. Allowing for push button promotion through environments of the services; using Chef, Terraform, Jenkins (pipeline plugin), and Packer.
 - Lead the internal adoption of operations best practices related to immutable infrastructure, configuration management, infra-as-code.
 - Consulted with and advised the security team on security best practices within AWS, e.g. IAM policy management, security groups, use of EC2 roles in-place of static credentials, etc.

Yale University (New Haven, CT)

December 2013 - August 2014

- Senior Systems Administrator
 - Configured and deployed a multitude of drupal based Yale sites within AWS.
 - Made use of configuration management to deploy new CAS services using JBoss in a highly available systems architecture.
 - Developed a custom functional test suite for testing email deliverability within a highly complex internal mail infrastructure.
 - Implemented a HIPAA compliant drupal systems infrastructure for sharing and publishing medical research between universities.

MobiTV (Emeryville, CA)

September 2011 - December 2013

- **Senior Systems Engineer - Devops Team**

- Work as a key member within the DevOps team. Responsible for assessing new tools and technologies that can automate and improve overall operational efficiency. This includes mentoring junior team members and ushering in a culture that embraces the “Infrastructure as Code” ideas.
- Automated the entire system monitoring process by integrating Nagios and Ganglia into the configuration management system: Puppet.
- Worked as part of a four-person team to design and deploy a configuration management system, using Puppet. Documented Puppet best practices after attending Puppet Labs training (Master and Developer).
- Migrated existing video stream (channel) monitoring from a legacy commercial product (Appman). Wrote several python scripts to automatically add/remove channels from monitoring based on guide data.
- Played a key role in the companies’ virtualization and server consolidation project using VMWare ESXi and VMWare vCenter. Wrote documentation on technologies and procedure for virtualizing over 500 existing systems.
- Installed and configured bare metal provisioning of ESXi and Red Hat systems using Cobbler’s kickstart server. Including post install server configuration, domain addition, etc.
- Lead a project to allow Quality Engineers to make use of temporary service stacks within VMWare and AWS for rapid testing.
- Implemented and automated VM backup management using VMWare’s vMA and several custom scripts to auto-backup, compress, rotate, and remove virtual machines. Scripted weekly reports of hundreds of backups; zero manual administration required.

MobiTV (Emeryville, CA)

February 2011 - September 2011

- **Linux Systems Administrator - Operations**

- Administered MobiTV’s production infrastructure that included several popular streaming platforms making use of Apple HTTP Live (HLS) and RTSP.
- Managed several monitoring systems including: Nagios, Cacti, Hyperic, and Appman.
- Authored scripts in bash and python to support the operations department in the rollout of changes to production.
- Created, reviewed, and implemented application and system updates that adhered to a rigorous production change control process.

Hostway Inc. (Tampa, FL - Remote from Emeryville)

Oct 2007 - February 2011

- **Unix/Linux Systems Administrator I**

- Worked as part of a three person team installing and configuring Nagios in a multi-datacenter environment. Implemented monitoring for over 20,000 host/service checks. Configured Nagios with host and service notification escalations utilizing email and jabber. Created custom Nagios plugins in BASH and Python.
- Consolidated legacy virtual hosting accounts to new hardware; utilizing FreeBSD 7 with ZFS. Scripted the removal of expired domains and accounts from legacy virtual hosting platform.
- Administered backups for over 300 servers using BackupPC and R1Soft. Performed backup audits and fix connectivity issues as necessary.
- Utilize SSH, Terminal Services, and Web based Control Panels to help administer servers and troubleshoot issues.
- Update and Create DNS Records for existing and new customers, as well as provide troubleshooting for DNS related issues.
- Perform post-install configuration and Q/A for new servers before being released to customers

Hostway Inc. (Tampa, FL - Remote from Emeryville)

October 2006 - October 2007

- **NOC Technician II**

- Install, upgrade, and repair servers for collocated customers.
- Installation and configuration of Windows Server 2003, FreeBSD, and Redhat.
- Rack new servers and assist facilities with cabling as needed.
- Use network and server monitoring systems to identify and respond to network outages, server outages, and facility alerts as they occur.

EDUCATION

- Associate of Science - Unix Systems Administration

CONFERENCES/COURSES ATTENDED

Seattle Datadog Summit (Seattle, WA)	2019
1 st Annual Hashiconf (Portland, OR)	2015
Monitorama (Portland, OR)	2015
Automacon (Portland, OR)	2015
PuppetConf (Palo Alto, CA)	2013
Velocity (Palo Alto, CA)	2013
Puppet Developer Training (Palo Alto, CA)	2013
Puppet Master Training (Los Angeles, CA)	2012

CERTIFICATIONS

AWS Certified Sysops Administrator Associate
AWS Certified Solutions Architect Associate
Puppet Professional - PPT-201 Puppet Labs, License PCP0000045
LPIC-2 - Linux Professional Institute - Level 2 (LPI000201578, Verification: zzytgky8l6)
NCLA - Novell Certified Linux Administrator
CompTIA Network+
CompTIA A+
MCP - Microsoft Certified Professional (70-270)

Professional references are available upon request