James Lavoy

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PROFESSIONAL PROFILE

Accomplished Engineer with Expertise in Designing, Developing, & Deploying Infrastructures & Systems to Achieve Goals

Areas of Expertise:
- ✓ Strategic Planning
- ✓ Solutions Development & Implementation
- ✓ Project Management
- ✓ Process & Performance Improvement
- ✓ Risk & Change Management
- ✓ Best Practices & Quality Control
- ✓ Business & Requirements Analysis
- ✓ Communications & Relationship Management
- ✓ Infrastructure Design & Deployment
- ✓ Disaster Recovery Planning
- ✓ Staff & Resource Oversight

➢ Accomplished and incisive IT and business professional with broad-based expertise providing vision, strategy, and leadership to support the development and delivery of high-profile products, platforms, and applications.

➢ Background demonstrates success overseeing the development of robust IT infrastructures while leading change and risk management initiatives.

➢ Possess the capability to define and implement strategies and best practices to optimize performance and productivity.

➢ A respected leader and solution provider with the skill to transition objectives into actionable plans, cultivate key relationships with internal and external business partners, and influence at all levels.

PROFESSIONAL CHRONOLOGY & ACCOMPLISHMENTS

Apple, Denver, CO ▪ 2022—Present
Infrastructure Engineer (2022 – Present)

Creating reliable, cost-efficient infrastructure to support the executive sales team at Apple.

KEY ACHIEVEMENTS:

- ▪ ***Redesigning infrastructure*** *to enable zero down-time deployments, and ~90% compute cost savings in AWS using Kubernetes.*
- ▪ ***Modernizing Kubernetes deployment strategies*** *around centralized pipelines, git-ops, helm charts, and best practices.*
- ▪ ***AWS Migrations****, moving from on-premise platforms. Including compute, database, networking and big-data workloads.*
- ▪ ***Facilitating developer enablement*** *by providing automation, tooling and observability to developers.*

Kandji, Denver, CO ▪ 2021—2022
Staff Infrastructure Engineer (2021 – 2022)

Lead a team in designing and implementing the first enterprise ready generation of MDM Infrastructure. Replacing the MVP product of the early start-up.

KEY ACHIEVEMENTS:

- ▪ ***Rebuilding efficient infrastructure*** *to facilitate 400% customer growth over a 12 month period with only a 25% increase in infrastructure spend.*
- ▪ ***Replacing outdated, error prone, manual deployment pipelines*** *to allow true, developer managed continuous deployment.*
- ▪ ***Implementing self healing infrastructure*** *allowing an 80% drop in break/fix support pages.*
- ▪ ***Helping development team transition from container base monolith*** *to microservice architecture leveraging kubernetes.*

Verizon, Denver, CO ▪ 2020—2021
Senior Infrastructure Engineer (2020 – 2021)

Designed and built the next generation of NDR SaaS infrastructure, leveraging infrastructure as code, many managed AWS Services and modern design philosophies.

KEY ACHIEVEMENTS:

- ▪ ***Rebuild IaC from the ground up*** *to allow for efficient, testable, and repeatable deployments.*
- ▪ ***Designed an entirely automated Continuous Integration and deployment system.*** *Eliminating the need for manual deployments and enabling change and deployment auditability.*

- ▪ ***Built and facilitated*** *several live migrations that could allow for 0% data loss or downtime.*
- ▪ ***Full redesign and rebuild*** *of microservices platform to a modern, scalable, and self healing platform.*

Weedmaps, Denver, CO ▪ 2019—2020
Senior Devops Engineer (2019 – 2020)

Work on a team of talented engineers designing and building resilient, scalable infrastructure. Automating workflows to limit developer pain and ensure high productivity. Maintaining a 100% AWS, 100% container based, 100% infrastructure as code environment.

KEY ACHIEVEMENTS:

- ▪ ***Designed an asset tagging strategy*** to allow business units to understand and audit their infrastructure Opex.

- ▪ ***Implemented a global CDN*** and malicious actor protection system leveraging machine learning across all public ingress points.
- ▪ ***Built highly available and resilient*** container based infrastructure using kubernetes and rancher in AWS.
- ▪ **Maintained and expanded** a 40,000 line terraform repository, describing our entire environment.

MTLEADMEDIA, Austin, Texas ▪ 2016—Present
Consultant

Provided consultative guidance and led the design and maintenance of a cluster of websites, supporting the entities insurance and mortgage businesses.

KEY ACHIEVEMENTS:

- ▪ Improved performance by designing, maintaining, and supporting a ***fault-tolerant, high-availability application stack***, using Kubernetes, NGINX, & PHP-FPM
- ▪ ***Captured cost savings of 80% in monthly server costs*** by migrating from a dedicated server stack to a shared resource kubernetes stack; established the infrastructure and managed stack provisioning, leveraging Spinnaker, ArgoCD, and Gitlab.
- ▪ ***Improved new server deployment*** through automation from server spin-up and configuration through monitoring and backups.
- ▪ Maintained seamless operations by working with developers ***to troubleshoot and resolve issues and set-up new applications***.

OPEN-SOURCE CONTRIBUTIONS

Hashicorp – terraform-provider-aws: https://github.com/hashicorp/terraform-provider-aws/pull/24395
https://github.com/hashicorp/terraform-provider-aws/pull/24765

TECHNICAL SKILLS

Specialties: Resilient, Scalable, Highly Available systems design; Cloud Architecture; Tooling and Automation

Compliance Experience: ISO-27001; PCI; SOX and FedRAMP

Programming Languages: Python; Go; Perl; PHP; Java; Bash and SQL

Operating Systems: CentOS; RHEL; Amazon Linux; Debian; Ubuntu; Alpine; Gentoo and FreeBSD

Virtualization: QEMU/KVM; Openstack; ESXI and HyperV

Container Orchestration: Kubernetes; Rancher; EKS; GKE; AKS and Packer

Containers: Docker; LXC and OpenVZ

Cloud Technologies: AWS; GCP; Azure and RackSpace Cloud

Storage Technologies: ZFS; Ceph and Glusterfs

Web Technologies: Apache; NGINX; Lighttpd and Varnish

Databases: PostgreSQL; Cassandra; Redis; Kafka; Percona; Galera; MariaDB and MySQL

Automation: Terraform; Cloudformation; Consul; Vault; Puppet; Ansible; Rundeck; Gitlab; Github; Codefresh; CircleCI; TravisCI and Bamboo

Monitoring & Logging: Zabbix; Prometheus; Grafana; Nagios; Icinga; Graylog; ELK and Datadog