JAMES SCOTT

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STAFF INFRASTRUCTURE ENGINEER, SITE RELIABILITY ENGINEER

Profile

A curious Staff Software Engineer with 18 years of experience and an infrastructure background. Skilled at scaling out systems from zero users to millions. Self driven and believes that through iteration, most difficult problems can be solved.

Skills

Reliable Observable Operations: Systems that can be seen can be fixed.

Distributed System Design: Designed hardened production systems that handle mission critical work loads at global scales.

Self Directed: Has worked remote for 8 years, and has a proven record to deliver results.

Technical

Go	Python	Java
Scala	Ruby	Linux
Kubernetes	Sequins	Puppet
Chef	Kafka	mongodb
hbase	cassandra	git
hadoop	hive	Dataproc
Nomad	Vault	

Experience

PlanetScale (Remote)

Software Engineer Edge

Jan 2023-Mar 2024

At PlanetScale I worked with the edge team which was responsible for the proxy layer that sits in front of the product. During my time at PlanetScale I was responsible for the deployment of the edge service, as well as the service itself.

When I joined, the Edge service was unique at PlanetScale as it did not live in kubernetes and was hand deployed. I developed a deployment system that used Hashicorp Nomad's exec driver to deploy the service, and run configuration management without ssh, or the need of a configuration management service. This project allowed us to replace our edge VMs every 14 days automatically with zero downtime. This allowed the service to automatically scale with the needs of our users.

Squarespace (Remote)

Tech Lead

June 2019-Aug 2022

Started as the Tech Lead for the MongoDB subteam on the Databases team. The first main task was scaling the large sharded MongoDB clusters. Migrated backups to a snapshot system in GCP, and worked with engineering teams to fix data models that did not scale.

I ended my tenure at Squarespace as the Tech Lead for Data Infrastructure. My team was responsible for all streaming and data processing infrastructure. In a short time we were able to migrate two legacy on-premises aging Hadoop clusters to Dataproc in GCP. During this migration I worked with many teams to burn down technical debt and migrate many ETLs and reports to offerings based in GCP.

Stripe (Remote)

Software Engineer

Apr 2016-Feb 2019

Worked with the Storage Team to globally scale out MongoDB, by writing tools to observe how the organization used the database, including code to fingerprint queries to optimize index usage. Also wrote tooling to automate day to day operations on a large set of sharded mongo clusters. In addition to the MongoDB work, I was in charge of development of Stripe internal open source data warehouse named "Sequins". This distributed read only key/value store sat at the end of the ETL pipeline at Stripe and stored everything from counts to trained machine learning models.

Urban Airship (Portland, OR)

Lead Operations Engineer (Security)

Mar 2013-Mar 2016

Scaled Urban Airship's push notification and analytic platforms though the mobile boom of the early 2010's. Leveraged Kafka to successfully deliver millions of messages a day on real hardware. I built deployment and operations tooling using python, and JVM based languages such as clojure and java. I was also leading the companies efforts around observability. I designed and built a distributed scaleable log parsing and analysis system on top of kafka, that was API compatible with the Elasticsearch/Logstash/Kibana system.

University of Dayton (Dayton, OH)

Systems Engineer

Jul 2006-Mar 2013

I was responsible for the University's successful single sign on Identity management project. This included a single sign on for all university resources. I also worked on the in house DNS/DHCP self registration system. Over the years the university transitioned from Netware to Linux to serve file and print services, during this transition I lead the project to move from hand configured nodes to using centralized configuration management with puppet. This greatly reduced toil for the operators.