

Senior Software Engineer, SRE ◇ Platform, Storage, Infrastructure  
he/him ◇ Seattle, WA

## Skills \_\_\_\_\_

**Languages:** Go, Python, Scala, Typescript

**Relevant Technologies:** Airflow, Docker, K8s, Azure/GCP/AWS,  
Bazel, Terraform

## Experience \_\_\_\_\_

### Senior Software Engineer

Zillow Group, Inc.

July 2023 - Present

*Seattle, WA*

Designed and leading the transition of Zillow's Industry Software DevOps teams into a self-service compute platform for >200 engineers. Responsible for operational duties, infrastructure and tooling architecture, maintainer on platform tooling and services. [AWS, EKS K8s, Terraform, Golang and Python, Gitlab CI.]

- Leading a team of nine engineers to transform the culture and processes of a traditional centralized DevOps team to a platform engineering support model; delivering self-service tooling and compute via an incremental approach to minimize risks and maximize impact.
- Founder and maintainer of the team's bazel monorepo, migrating all code and services to a single repository to simplify the build process, increase code reuse, reduce abandoned code, and keep dependencies up to date uniformly.
- Develops the yearly roadmap to align with business priorities while also triaging tech debt.
- Drove adoption of platform tooling across 19 teams and hundreds of services to standardize deployments. Tooling improved deployment feedback and ergonomics which improved developer velocity while also adding observability and reporting from
- Rewrote EKS cluster definitions and cluster bootstrap process, added functionality to allow for ephemeral compute and easier A/B testing with our kubernetes stack and faster iteration on platform changes, disaster recovery and kubernetes version upgrades.

### Senior Software Engineer

Twitter, Inc. - Blobstore (Distributed KV Object Storage)

Dec 2018 - Nov 2022

*Seattle, WA*

As a team of nine, we managed over 70PB of user data, handling 100 million requests per day in an on-premises, multi-datacenter, eventually consistent distributed system developed in-house. As the infrastructure lead, I oversaw approximately 8,000 physical machines, managed compliance and chargeback reporting, hardware provisioning and automation, observability, tooling, deployments, anti-entropy services, and delivered critical service features.

- Developed and automated chargeback reporting for customer data, transforming a manual and annual process into a daily automated metric covering network, API usage, storage class, and data locality charges.
  - Customers could now make informed decisions and assess how service changes impact cost.
  - Helped the team prioritize features to help teams improve performance and cut costs like allowing customers to choose replica count per dataset or which datacenter to write to.
- Developed a state-aware locking service that would approve operations on the dataset allowing operators to work safely and independently without impacting service health or causing downtime.
  - This enabled no-touch deployments and hardware failure remediation, saving weeks of developer operational toil annually.
  - Oncall pages reduced from 90/wk to 4-5/wk

- Deployment frequency increased from several times a quarter to weekly for stateful services and twice a week for stateless.
- Compliance automation rolled 8k hosts in less than 25 days with no manual intervention and negligible service impact. As a result Blobstore was consistently in the top 5 of patched fleets across the company.
- Implemented anti-entropy services to scan large metadata dumps, billions of keys processed via MapReduce fed a key-list to repair workers to patch production datasets every week.
- Migrated stateless services from baremetal to Aurora Mesos compute to ease operational burden, improve developer velocity and service reliability as well as cut \$100k from annual COGS.

## Software Engineer

Microsoft Corporation - Dynamics 365

Aug 2015 - Nov 2018

*Seattle, WA*

Worked remote to a Switzerland-based infrastructure team that developed Microsoft Social Engagement (a social media sentiment analysis) product's backend and large Elasticsearch clusters. Later moved to a backend product team developing the account management api for Dynamics CRM.

- Owned infrastructure and agent tooling for the product.
- Owned livesite operations, infrastructure automation, observability for the product.

## Education

### Bachelor of Science, Computer Science

Gonzaga University, Spokane WA

### Clubs and Activities

Computer Science Club	ACM ICPC, PNW	3rd On-Site two years running
Men's Rowing, Div. 1	Math Club	
Cycling Club	WSU Hackathon	

## Leadership

- Mentored two cohorts of new grads and interns with weekly 1:1's, adhoc sessions and code reviews to help them ramp up into Twitter Engineering!
- Ambassador for Twitter Seattle 2021-2022. Responsible for planning events, creating opportunities for colleagues to socialize in a hybrid environment, as well as assisting onsite operations management.

## Extra-Curricular Activities

- King County Search and Rescue Team member since 2024! "So that others may live!"
- Avid mountain climber and adventure traveler! Summited Mt. Baker, Mt. Shuksan, and Mt. Hood; hiked the Salkantay Trail in Peru!
- 3d Printing enthusiast! I solve my everyday problems with plastic.