

Olive Haven

she/they

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Portland, OR, US

Wife 🧑, Dog Mom 🐶, Queer Geeky Hacker 🧑, Senior SRE and Software Engineer 🧑. Always looking out for my team and to nurture healthy work lives. A job's only as good as the people you work with 😊
Currently looking for full-time remote work as an SRE at companies with at least 100 employees, a preexisting SRE team, and great engineering culture!

Experience

Senior System Reliability Engineer

Mar 2021 - Jul 2022

[Armorblox](#) · Sunnyvale, CA

Initially hired as a Product/Platform engineer for this email security startup, I saw the normal startup gaps in engineering culture and production reliability and worked with the CTO and engineering managers to help plug these by creating documentation and engineering standards. This discussions led into the creation of a dedicated Systems Reliability team where as founding member I helped hire and train Junior, Senior, and Principal engineers. My main goal was to get each member of this small team up to speed, able to progress as individual engineers, and to support the broader engineering org. On this small but agile SRE team, I was able to prioritize the following engineering goals:

1. Automation of manual tasks in the production (also development and staging) environment, primarily leveraging Stackstorm workflow/runbook automation services.
2. Improved development workflow and maturing engineering culture with Bitbucket Pipelines and Jenkins CI/CD and improvements to in-house Kubernetes/Helm development environment.
3. Monitoring application and infrastructure services with Prometheus and Grafana.
4. Oncall rotation with actionable metrics & dashboards, detailed runbooks, and incident response procedures to improve detection of and response time to incidents in production systems.
5. Infrastructure as Code defining environments, clusters, services with reproducible Terraform, Helm, and ArgoCD code managed in understandable and testable Git repositories.
6. Catch-all startup fire management and aid to developers, QA engineers, and Customer Support staff who need help understanding, interacting with, fixing issues, as well and learning and developing solutions to prevent future problems.

Senior Engineer

Mar 2020 - Mar 2021

[New Context](#) · San Francisco, CA

Remote security consultant contracting with large enterprise clients to do security analysis of infrastructure. I created Go microservices leveraging GCP, AWS, Kubernetes, and Postgres APIs to do internal service discovery and track sensitive data flow throughout organizational infrastructure. The results of this analysis were stored extensible neo4j graph database and surfaced as security and business metric queries and dashboards.

Senior Trust Engineer

Feb 2017 - Feb 2018

[Atlassian](#) · Mountain View, CA

Building distributed microservices in Go for internal Identity APIs. This involved interacting with various Product, Platform, and SRE teams across Atlassian to support their specific use cases of a overarching Atlassian product and user Identity. My main task was building a distributed, high reliability, low latency authorization store from scratch meant to be the backend authorization provider for all modern Go microservices (with legacy support for custom authorization architectures already in place in Jira and Confluence). Much of this work was on low-level performance tuning of queries to shared Cassandra and Redis databases. I gained a lot of monitoring and performance tuning skills by working with Atlassian's amazing embedded SRE team to:

1. Implement custom metric gathering with Prometheus.
2. Create performance & reliability monitoring dashboards in Honeycomb.
3. Set up service specific alerting, oncall rotation, and runbooks.
4. Create automated CI/CD testing and full microservice load testing across staging environments.
5. Full ownership of the services release management, including GitOps for environment management and hotfixes

Skills

System Reliability Engineering (SRE)	Authorization (AuthZ)
Software Engineering	Identity & Access Management (IAM)
Systems Programming	Go (Programming Language)
Microservices	Kubernetes
Automation	Google Cloud Platform (GCP)
Service Monitoring	Amazon Web Services (AWS)
Debugging	Stackstorm
Software Archaeology	Terraform
Infrastructure as code (IaC)	GitOps
GitOps	ArgoCD
Network Security	Grafana
Cryptography	Helm Charts
Authentication (AuthN)	Prometheus

Education

BS, Computer Science, Mathematics Minor
Stanford University

High School, Mathematics and Computer Science
Gatton Academy of Mathematics and Science

Distributed Systems/Security Engineer

Jun 2016 - Dec 2016

[Salesforce](#) · San Francisco, CA

Created a Public Key Infrastructure for internal services including HSM-backed CA with CFSSL and puppet managed end service public key credential generation.

Links

[haven.lol](#)

[github.com/0xhaven](#)

[linkedin.com/in/0xhaven](#)

[twitter.com/0xhaven](#)

Cryptographic Systems Engineer

Sep 2014 - Mar 2016

[Cloudflare](#) · San Francisco, CA

Improved global web cryptographic standards and implementations. Helped provide fast and secure TLS for free to millions of sites by implementing low level extensions to standard nginx to allow dynamic TLS cert and key lookup from a global distributed cache. Improved many open source PKI and generic infosec infrastructure software in OpenSSL, Go, and CFSSL toolkit. Created "Keyless SSL" software in Go allowing use of proxied TLS keys from otherwise untrusted edge servers so that TLS wouldn't need to be shipped to untrusted datacenters or hostile jurisdictions. Learned a great deal about the modern TLS ecosystem on the internet, including spending many hours on code archaeology of various server and client codebases or testing closed source implementations to diagnose and fix/workaround protocol bugs as they came up in the wild.

Tor Project Student Developer

Jun 2014 - Jul 2014

[Google Summer of Code](#) · Stanford, CA

Worked on packaging ooni-probe (part of the Open Observatory of Network Interference) for easy access and use in locations where ISPs or Governments are blocking Tor. Learned a great deal about the obfuscation (and detection) techniques used in the wild to hide (and identify) encrypted communications.

Software Development Engineering Intern

Oct 2013 - Dec 2013

[Amazon](#) · Seattle, WA

Built robust service for distributed hotspot detection in Amazon Web Services S3 cloud storage system

Software Engineering Intern

Jul 2013 - Sep 2013

[Mozilla Corporation](#) · Mountain View, CA

Added SPDY support to OWASP ZAP webapp penetration testing tool by rewriting network stack using the Netty framework.

Security Intern

Mar 2013 - Jun 2013

[VMware](#) · Palo Alto, CA

Added Secure Boot to virtual UEFI firmware across all VMware products by implementing public key based authentication in virtual storage device

Security Infrastructure Intern

Jan 2013 - Apr 2013

[Facebook](#) · Menlo Park, CA

Worked on mobile security, including prevention, detection, and removal of Android malware

Cryptography Researcher

Jun 2012 - Sep 2012

[Stanford CURIS](#) · Stanford, CA

Designed and implemented, using C++ and NTL, a highly optimized Lattice-based Fully Homomorphic cryptosystem based on a polynomial ring translation of [Brakerski12] resulting in a paper and poster.