

Experience

Aug 2023 - Present
Remote (Seattle)

Warp

Senior Software Engineer, Revenue & Experimentation, Cloud

Billing Framework

- Designed and implemented entire end-to-end billing framework, unblocking enterprise deals and self-serve customers, and allowing Warp to start generating revenue and grow to \$250k ARR.
- Automated provisioning customer to billing tiers by integrating with Stripe for our self-serve subscription offerings, and built tooling for sales and marketing to define custom tiers across all of Warp's features, along with internal product infrastructure for gating and enforcing said features across all clients and servers.

Workspaces

- Contributed to major overhaul to standardize the format, authentication, and error handling of all of Warp's GraphQL APIs, along with building additional flexibility into the APIs for scoping requests to Workspaces - a higher-level construct on top of Teams for enterprises with complex organizational requirements.

Aug 2018 - June 2023
San Francisco, Seattle

Databricks

Software Engineer, Application Infrastructure

New Rate Limit Service

- Led the project for building a global rate limit service using gRPC and redis, providing low-latency rate limiting for ingress traffic of over 100k QPS in larger control planes, as well as internal control plane traffic.
- Added support for dynamic rate limits, negating the need for service redeploys and reducing turn-around time for new rate limits from minutes to seconds.

Service-to-Service Communication

- Led the project for updating the RPC service framework used by all Databricks control plane services to use per-service provisioned secrets to generate signed JWTs for communication instead of HTTP headers, standardizing service-to-service context propagation, and strengthening the security of requests across Databricks services.

Monolith to Micro-service

- Worked on re-architecture of the largest Databricks monolith into stateless and scalable micro-services. Extracted authentication/authorization logic into new auth service, and routing logic into new proxy service using envoy.
- Released and scaled new gateway services, greatly improving availability, stability, and monitoring of Databricks API gateway layer, halving the p99 request latency for all incoming traffic to Databricks control planes.

2017

Block (Square)

San Francisco
Software Engineering Intern, Analytics & Reporting

2017

Wealthsimple

Toronto, Canada
Software Engineering Intern, Backend Team

2016

NVIDIA

Santa Clara
Software Engineering Intern, GeForce Now

2015

Microsoft

Tokyo, Japan
Software Engineering Intern, Office

2015

PlacIQ

New York
Data Science Intern, Data Team

Education

2013 - 2018

University of Waterloo

Bachelor of Software Engineering

Technical Skills

Rust, Go, GraphQL, Stripe, GCP, Scala, Python, Kubernetes, Envoy, gRPC, Redis, AWS, Azure, SQL
distributed systems, API gateways, microservices, service framework