

Employment

Ramp Remote
Senior Software Engineer
Jan. 2024 to Current

Stripe Seattle, WA
Senior Software Engineer
Jan. 2023 to Jan. 2024
Working on encryption/tokenization services and infrastructure in Stripe's Cardholder Data Environment.

Software Engineer Seattle, WA
July 2020 to Jan. 2023
- Introduced a priority-based load shedding system for internal multi-tenant databases based on various database health signals
- Implemented build-time safety & compatibility checks for complex database schema changes
- Created latency & availability metrics pipeline for database SLO/SLC monitoring

- Scoping, implementing, and rolling out infrastructure and services for the initial use of AWS Nitro Enclaves at Stripe
- Facilitated several engineering-focused "101" sessions for onboarding new employees
- Mentored interns and new grad engineers on their early career growth

Citadel New York, NY
Software Intern
Sept. 2019 to Dec. 2019
- Refactored firm-wide portfolio size calculation code, reducing running time from O(hours) to O(minutes)
- Added dozens of new timeseries data ingestion pipelines into a central system to remove legacy systems
- Contributed to reporting software that produced vital recurring reports for portfolio managers and top executives outlining current profit/loss figures and risk exposure

Stripe Seattle, WA
Infrastructure Intern
Jan. 2019 to Apr. 2019
- Crafted new infrastructure for the secure Cardholder Data Environment
- Enabled cross-cluster database replication by creating underlying infrastructure and custom code
- Oversaw project to guarantee timely deletion of sensitive transient transaction authentication data
- Reduced the compliance burden of credit card security standards on the rest of Stripe engineering

Apple Cupertino, CA
Safari Intern
Apr. 2018 to Aug. 2018
Developed exciting new features for the Safari application on MacOS and iOS.

Microsoft Seattle, WA
Backend Intern
Sept. 2017 to Dec. 2017
- Developed highly requested file storage solution for Microsoft Dynamics 365 CRM leveraging Azure
- Lowered storage costs by over 90% and provided a 30x increase in storage capacity
- Implemented secure valet-key design pattern to handle the scale of Fortune 500 companies
- Ensured backwards compatibility with legacy enterprise software

Shopify Toronto, ON
Backend Intern
Jan. 2017 to Apr. 2017
- Reduced response time by over 70% on key webpages by refactoring, optimizing database tables, and caching expensive calculations
- Shipped and ran zero-downtime schema migrations on active tables with millions of rows of critical data
- Coordinated with Amazon to integrate modern API changes and eliminate deprecated API

Wattpad Toronto, ON
iOS Developer Intern
May 2016 to Aug. 2016
- Ran numerous A/B experiments to boost user engagement, retention, and satisfaction
- Increased monthly usage by over 10 million minutes on mobile

Projects

Dropboxfs, an in-memory filesystem for Dropbox - bit.ly/dropbox_fs 2019
- Designed and implemented an in-memory filesystem in userspace (FUSE) that connects to Dropbox written in Go
- Allows for users to access their Dropbox contents on demand without requiring disk space
- Supports all regular file operations and synchronizes changes across devices

Nfinite.space - bit.ly/nfinite 2016
- Award-winning cloud storage service that stores files without the need for a datacenter by intelligently and dynamically sharding files to connected peers
- Solely responsible for developing our backend using Go and CockroachDB on AWS

Skills

LANGUAGES	TOOLS
Go	Vim
Ruby	Xcode
Objective-C	Instruments
Swift	Git
C++	AWS
Python	GDB
SQL	MySQL

Awards

Apple Inc, WWDC Scholarship
- Won international competition for a ticket to Apple's World Wide Developers Conference in 2014, 2015 and 2016
- Developed an Objective-C & Swift application with creative and playful UI
- Judged and chosen by Apple out of thousands of applicants to receive scholarship each year

QHacks, Best Use of AWS Feb. 2017
Awarded for work on Fastify.

Hack The North, Best Use Of AWS Sept. 2016
Awarded for work on Nfinite.space.

CODEFest, 3rd Place Oct. 2015
Awarded for work on NearEYE.

Tech Retreat Hackathon, 1st Place Aug. 2015
Awarded for work on MarketMesh.

Education

University of Waterloo
BSE Software Engineering 2020
President's Scholarship of Distinction, President's International Experience Award

Interests

Biking, Hiking, Backpacking, Photography, and Mastodon