

Seikun Kambashi

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Experience

Senior Software Engineer | Revenue and Experimentation, Code

Warp.dev

August 2023 – Present

Remote (Seattle, WA)

Codebase Indexing

- Spearheaded datastore architecture for scaling up our codebase indexing system. Implemented integrations with Bigtable for document embedding and merkle tree caching, and turbopuffer for high-performance vector search for documents in coding interactions with our LLM agent.
- Designed and implemented schema for distributed caches and vector indices, with a focus on preventing race conditions and ensuring consistency during high-concurrency access patterns. Implemented cache eviction strategies to clean up stale data while maintaining data integrity and performance under load.
- Built merkle tree diffing logic to reconcile local snapshots against real-time filesystem state, ensuring accurate sync between client and server on app initialization.

Enterprise Database Isolation

- Implemented and rolled out new single-tenant database layer for enterprise customers with stronger security guarantees and database isolation.

Billing Framework

- Designed and implemented comprehensive end-to-end billing framework to support multiple subscription plans and enterprise tiers, unblocking revenue and enabling the company to grow to over \$2m ARR in one year.
- Integrated Stripe for automated tier provisioning and built a framework to enforce feature limits across all clients and servers. Enabled cross-functional teams to adjust tier limits, define custom enterprise tiers, and run feature-driven conversion experiments.

GraphQL V2

- Implemented new standardized request/response format and streamlined process for defining new GraphQL APIs, reducing generated code by 10%, and improving compile times and developer productivity on our Rust client.

Software Engineer | Application Infrastructure, Gateway Infrastructure

Databricks

August 2018 – June 2023

San Francisco, CA / Seattle, WA

Rate Limiting Service

- Led development of a custom, global rate-limiting service built on gRPC and Redis, handling over 100k QPS of incoming traffic to the control plane in the largest regions.
- Replaced an open-source service with a custom implementation to enable tighter integration with internal tooling, support for dynamic rate limits, and rapid abuse mitigation, reducing response time from minutes to seconds.

Service-to-Service Communication

- Led the transition of Databricks' RPC service framework from using HTTP headers with shared secrets to per-service provisioned secrets for generating signed JWTs, standardizing context propagation across control plane services, and ensuring secure request authentication and auditing.
- Collaborated with cross-functional teams across multiple technology stacks (Python, Scala, Java) to ensure smooth integration and consistent context propagation between services.

Monolith to Microservices

- Contributed to re-architecting Databricks' largest monolithic application into scalable, stateless microservices.
- Extracted authentication and routing into independent services using gRPC and Envoy, reducing p99 latency by 50% and enabling independent scaling of proxy and auth services for high-traffic API requests.

Internships

Software Engineering Intern | Analytics and Reporting

Block Inc. (Square)

September 2017 – December 2017

San Francisco, CA

Migrated Square's report generation service to Google Cloud and implemented distributed Spanner reads, optimizing large-scale report processing.

Software Engineering Intern | Backend

Wealthsimple

January 2017 – April 2017

Toronto, Canada

Developed and released a ruby-on-rails backend service for a new user onboarding process, A/B tested onboarding flows, and created dashboards to track conversion rates and performance.

Software Engineering Intern | GeForce Now

NVIDIA

May 2016 – August 2016

Santa Clara, CA

Developed Jenkins integration pipelines using AWS CodeDeploy, reducing integration time by 3x. Re-architected deployment processes to enable platform-agnostic microservice deployments.

Software Engineering Intern | Office

Microsoft

September 2015 – December 2015

Tokyo, Japan

Implemented an account linking feature for Docs.com to provide external users access to Microsoft services, and refactored code to improve maintainability and testability.

Data Science Intern | Data

PlaceIQ

January 2015 – April 2015

New York, NY

Processed and transformed terabytes of raw data through Spark, supporting ad campaign data needs and optimizing data quality.

Education

University of Waterloo

Bachelor of Software Engineering, Co-op Program (with distinction)

August 2018

Waterloo, Canada

Skills

Rust, Go, Scala, Python, Kubernetes, Envoy, gRPC, GraphQL, React, Redis, BigTable, turbopuffer distributed systems, API design, microservices, service framework, vector databases