Marin County, CA dsilver1221@gmail.com

Software engineer, technical leader, and mentor with eight years experience building developer tools that reach billions. Specializing in mobile SDKs, backend development, and high-scale distributed infrastructure.

Experience

Senior Software Engineer Google

San Francisco, CA January 2017 – Present

Engineer on Firebase Remote Config, Google's feature flagging and optimization product for developers. Remote Config is used by XXXk apps and touches XXB end-user clients daily.

Technical Leadership

- Closed a key gap in users' decision making loop by integrating Remote Config with best-in-class monitoring tools Firebase Crashlytics and Google Analytics. The result, Remote Config rollouts, offers real-time stability and business metrics correlated with feature flag rollouts. Led the cross-product integrations: partnered closely with engineers and PMs on the respective teams to create a productive working environment for all three groups; led design and execution across iOS and Android SDKs, Boq/Pod backends, OnePlatform APIs; worked directly with alpha partners; and co-led the launch alongside the other project TLs.
- Reduced configuration update time from 12+ hours to minutes by launching <u>real-time Remote Config</u>, the top
 user-requested feature for Remote Config. Drove 1-year adoption to XXk apps (incl. XX% of the product's top 1k
 customers), reaching XXXM end-user clients. Led iOS and Android SDK production-readiness and API usability
 studies, and organized the cross-functional feature launch.
- Maintained and led engineering for Remote Config's open source Android SDK (<u>GitHub</u>), found in XXB end-user clients and consistently one of the most used SDKs in the Play Store. Directly led and/or advised feature development and maintenance in the SDK for 5+ years with emphasis on a stable developer ecosystem.
 Onboarded multiple engineers to develop features in the SDK. Supported customers directly via GitHub, Slack, and Firebase support cases.
- Grew the team by mentoring teammates on engineering skills, team work, and career growth. Noted team expert
 on SDKs and infrastructure, frequently gave formal and informal tech talks on team and Google infrastructure
 including at the App Config team summit. Advised projects, including server-side Remote Config, on scalability.

Individual Contributions

- Scaled an unconventional streaming HTTP service (real-time Remote Config) to handle 6x concurrent RPCs while only using 2x RAM, enabling the feature to grow in a compute resource-constrained environment. Achieved zero service downtime while working experimentally on the production service. Worked deeply in Google's serving, load balancing stack, and monitoring stacks (ex. GSLB, JVM tuning, DoS and task-level protection, and pprof) and became the team's go-to engineer for the service.
- Brought ML-driven personalized configuration to Remote Config as a co-inventor of Remote Config
 personalization. Developed, launched, and maintained its bespoke ML infrastructure, improving batch and
 streaming map-reduce style job stability.
- Saved \$XMM/y in compute resource spend for our team by leading the turndown of Firebase Predictions (the predecessor to personalization). The turndown was highlighted in the Google Developer organization as a model product deprecation and nominated for a tech impact award.
- Represented the Remote Config product with users: worked with customers directly through product interviews, alpha programs, Google Developer Expert and Firebase events. Partnered closely with DevRel, tech writers, and

- support engineers to contribute substantial portions of Remote Config public documentation (ex. <u>real-time</u> Remote Config) as well as two official blog posts and an I/O talk.
- Enabled Firebase, Google Analytics, and Ads teams to test their SDKs as a co-maintainer of <u>Flood-It!</u>, a real-world app in the Play and App Stores.
- Kept Remote Config reliable as a member of a Tier 2 (< 20 min. response) on-call rotation for Remote Config,
 A/B testing and their infrastructure. Served as incident commander, primary responder, and postmortem author numerous times and mentored others on best practices for incident response and healthy on-call life.

Software Engineer

San Francisco, CA

Twitter

September 2016 - January 2017

Software engineer on Fabric, Twitter's developer platform, acquired by Google and merged with Firebase in 2017.

• Launched SDK integrations with 1st and 3rd party products to build Fabric's portfolio of developer tool offerings. Full stack contributor across iOS, Android, React-based front-end, and Ruby/Clojure/Java backends.

Education

Middlebury College

Middlebury, VT

B.A. Computer Science

September 2012 - May 2016

Computer Science major and mathematics minor. Senior thesis on collaborative frameworks for visual analytics.

Published Work

Personalized Application Configuration As A Service

Co-inventor, US Patent US20230367581A1

US Patent Filed 2021, Iss. 2023

Ship faster with feature flags

Speaker and author

Google I/O 2023

Introducing Remote Config real-time updates

Maximize Revenue with Remote Config Personalization

Co-author

Firebase Blog 2023