

David D. Smith

Software Engineer — Reliable Distributed Systems & AI Training — France/USA Dual Citizen

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Experience

Software Engineer, Production

11/2021 – 5/2026

Meta Platforms

Bay Area, On-site/Remote, full-time

AI Training Data Platform

2024 – Present

- Led migration of large-scale AI training platform from bare metal to containerized architecture, reducing fleet size 30% and saving \$200M/year in power.
- Built capacity planning “rate card” model for multi-org compute allocation. Re-architected ZooKeeper coordination layer to support 100K+ node clusters via session sharding.
- Led production engineering team embedded in 50 software engineer AI infrastructure team.

Ads Signals

2021 – 2024

- Led 10-person PE team (200 SWEs) during Apple ATT crisis, building privacy-preserving k-anonymity models to recover ads measurement for opt-out cohorts.
- Rewrote Identity Prediction service (C++ coroutines, tail-at-scale retry), halving latency and delivering \$25M/year in capacity savings.
- Designed and stood up Signals Replay team: canary facility A/B-testing each change against 24hr prod data with synthesized opt-out signals. Co-designed data contracts (codegen + unified counters) to prove signal bucket integrity.
- Unblocked critical production launch by identifying and eliminating $O(n^2)$ JSON decoding bottleneck under live traffic; first “Fix of the Week” in 2+ years, presented at company Q&A.

Software Engineer, Platform

4/2019 – 5/2021

NerdWallet

Bay Area, On-site/Remote, full-time

- Owned major backend Message Broker service. Ported to Go. 12K QPS, MTBF up 11x.
- Built software dependency management for JS/Py/Go/PHP code with Renovate.
- Implemented SLOs, SLIs, and error budgets with DataDog and Kibana.
- Core contributor to company software engineering best practices and standards.

Senior Information Security Engineer

5/2017 – 2/2018

Ripple

San Francisco, CA

- Owned corporate IT security and infrastructure across onsite, AWS, and IBM SoftLayer.
- Drove adoption of OWASP Security Best Practices across Ripple’s SSDLC.

Senior Site Reliability Engineer

10/2007 – 2/2017

Google

Bay Area, CA & Tokyo, JP

- GCP AppEngine SRE (2014-2017): Deployed AppEngine to new “miniclust” architecture in Tokyo. On-call for Snapchat, largest GCP customer at the time.
- Cluster Management SRE (2011-2014): Ported Babysitter cluster manager to Google’s main repo. Peer award for killing legacy //depot/google repo.
- SysOps & Goobuntu (2007-2011): Early member of Google SysOps (pre-SRE), owning core corporate infrastructure. Contributed to Linux OSS for TPM support.

Education

West Virginia University

College of Arts & Sciences

B.S. Mathematics

December 29, 2004

- Specializations in Cryptography, Linear Algebra & Optimization

West Virginia University


College of Engineering

B.S. Computer Science

May 15, 2005

- Specializations in Distributed Systems, Compilers & Numerical Analysis

Skills & Languages

Technical: Python, C++, Go, PyTorch, Data Pipelines, AI, K8s, Debugging,  Linux, Math & \TeX
Languages: English & Japanese fully bilingual, conversational French, France/USA dual-citizen