San Francisco, CA
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Nathan Leiby

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Technical leader with 13+ years of experience scaling mission-driven organizations from early stage to growth.
Expert in building reliable distributed systems, data pipelines, and authentication platforms serving millions of users.
Track record of growing engineering teams and delivering strategic technical initiatives that drive business impact.

Work Experience

Software Engineering Lead **Stable Auto** **2022–2023**

- Led architectural overhaul of climate-tech startup's core platform as first full-time engineer – transforming a brittle MVP into a system processing thousands of sites with near-zero error rates and driving ARR growth to $1M+.
- Scaled engineering and data science team impact through technical leadership, establishing development best practices (code review, on-call, testing, CI) while mentoring team members and fostering a culture of ownership.
- Optimized ML infrastructure, reducing median simulation times from 5 minutes to 1 minute (80% faster), enabling real-time user feedback and accelerating data science iteration cycles.

Staff Software Engineer **Clever** **2021–2022**
Identity & Analytics team

- Achieved zero downtime minutes for 10M+ daily users for mission-critical SSO platform during peak back-to-school traffic by leading and delivering on initiatives like multi-region support and load testing.
- Architected backend for a new Identity Management product, designing scalable data pipelines and core services that drove adoption by 100+ school districts in the first year and established a new revenue stream for Clever.
- Led technical delivery of Google Classroom Rostering, implementing scalability and reliability improvements, enabling adoption by 1000s of schools, and contributing to a strong strategic and financial partnership with Google.

Senior Software Engineer **Clever** **2019–2020**
New Products team

- Led technical design of Edtech Analytics platform from inception, building scalable system capturing time-on-task data for 5M+ daily users while providing actionable insights to school leaders.
- Designed and built COVID-19 Participation Reports, enabling some of the largest US school districts to rapidly identify and support struggling students during an unprecedented shift to remote learning.
- Set technical vision for data engineering at Clever, mentoring other engineers while collaborating with Infrastructure team to implement foundational capabilities, including Kinesis event ingestion and Spark data analytics.

Software Engineer II **Clever** **2015–2018**
Infrastructure Team

- Founding infrastructure team member; we transformed Clever's development environment by implementing Docker containerization, ECS orchestration, and infrastructure-as-code using Terraform and CloudFormation – creating tooling that all engineers used multiple times daily and rated as best-in-class despite our lean infra team.
- Architected core infrastructure in Golang, including a high-performance log ingest and search (1TB+/day), and designed intuitive and secure secrets and configuration management system.
- Drove cultural transformation to adopt robust CI/CD and automated deployments, dramatically improving engineering velocity and product reliability.

Software Engineer **Clever** **2013–2014**

- As an early engineer (#6), built Clever’s core product, creating automated integrations with student information systems and exposing a unified API. This laid the groundwork for the company’s rapid growth.

Data Science Fellow **Data Science for Social Good** **Summer 2013**

- Selected for competitive fellowship, where I collaborated with a cross-functional team to design, build, and evaluate a machine learning plugin for Ushahidi, a crowdsourced crisis reporting platform.

Software Engineer (part-time) **Caris Foundation** **2011–2013**

- As the sole engineer, designed and built digital tools for early-infant HIV diagnosis tracking in Haiti. Significantly improved data sharing between community health workers and the National Laboratory of Public Health.

Software Engineering Lead **Raxa** **2011–2013**

- Recruited, hired, and led an engineering team in India, building open-source tools for rural healthcare settings and collaborating with a globally distributed team of volunteers.

Software Engineer in Test **Microsoft** **2010–2011**

- Enabled high-quality Windows Phone 7 OS releases by building various automated tests, including integration, performance, stress, and generative tests.

Education

Bachelor's Degree in Computer Science, Harvard University **2006–2010**

- Teaching assistant for CS50: Introduction to Computer Science
- Lab research and study abroad with Botswana Harvard School of Public Health AIDS Initiative

Technologies and Languages

- **Infrastructure & Systems:** Distributed Systems, ML Infrastructure, Cloud Architecture (AWS, GCP)
- **Languages & Frameworks:** Python, TypeScript, Golang, Rust, React
- **Data & Storage:** PostgreSQL, DynamoDB, MongoDB, Redis
- **DevOps:** Terraform, Docker, ECS, GitHub Actions, CircleCI

Other Experience

Recurser **Recurse Center** **Nov-Dec 2024**

- Focused on self-development in a 6-week programming retreat. I built projects that piqued my curiosity, such as a Nintendo emulator and a Rock Band-style rhythm game, using the Rust programming language.

Volunteer **Tech for Campaigns** **2019–2024**

- Empowered grassroots progressive political campaigns by collaborating with fully remote teams as an engineer and team lead. Provided technical expertise to projects including ingesting campaign finance data, designing email marketing templates, and building candidate websites.