Stephen Crosby

Software Engineer | Architectural Leadership | Product Growth | Developer Platforms

📍 Santa Barbara, CA | 📞 559.892.1731 | ✉️ stevecrozz@gmail.com
🌐 lithostech.com | github.com/stevecrozz | ruby.social/@stevecrozz

Professional Summary

Software engineer with 20 years building web platforms, APIs, and developer tooling. I find the changes an engineering org needs, earn the trust to make them, and bring the org along.

Core Skills

- **Languages**: JavaScript/TypeScript, Ruby, Go, Python, C++
- **Frontend**: React, modular packages, design systems
- **Backend & Data**: Postgres, MySQL, GraphQL, Redis, MongoDB
- **Infrastructure**: AWS, Kubernetes, Helm, Docker, Podman, Terraform, CI/CD
- **AI & Agents**: agentic workflows, MCP, agent skills, sandboxed agent execution
- **Practices**: API-first design, system architecture, monorepo tooling, DDD, OOP, functional programming, mentoring, debugging, scaling distributed systems

Experience

Dropbox – Senior Software Engineer, Tech Lead, DocSend

Remote | Nov 2021 – Oct 2026

- Wrote the vision for AI-driven autonomous engineering at DocSend, targeting 20% of Jira tasks reaching a human-approved PR with no significant changes requested. Built the agent skills to make it work: they gather full ticket context across linked services, implement the task, and post evidence and demos to the PR. Met the 20% target in pilot testing. Colleagues extended it to Mac and integrated it with Minions, Dropbox's agent delegation loop, and I brought it to the cloud on Nova (internal cloud-based agent workflow engine).
- Architected and launched Advanced Virtual Data Rooms, a new line of business built with two engineering teams. It reached $5M ARR in its first 12 months, has since passed $10M, and is the strongest growth driver in DocSend since launch. Trained the team on faster frontend practices so a critical 2024 marketing launch shipped on time.

- Initiated a successful internal skills marketplace for engineers and agents working on DocSend, increasing collaboration and advancing AI adoption. The skills marketplace is now a community of engineers who have contributed and maintain dozens of useful skills and skill development is now a persistent topic of conversation in slack.
- Conceived and built a sandbox system for running autonomous coding agents safely in parallel: isolated Linux containers per environment, each with all the services the app needs. Replaced S3, DynamoDB, and Elasticsearch with lightweight local equivalents, and modified zincsearch, a much lighter Elasticsearch alternative, to pass our full test suite. This made it possible to run a dozen agents at once on one 32GB laptop. Added a per-sandbox MCP/TCP proxy for egress firewall rules, then ported the stack to Dropbox's Nova agent platform and, through Podman on Linux and Mac, to a second internal agent environment in about a week.
- Turned DocSend's multi-step checkout into a single step to recover the drop-off at each step. Checkout conversion rose 5.2%, with a projected 9% ARR increase. Worked with Engineering, Product, Finance, and Data Science to clear financial reporting blockers, and removed the legacy checkout code.
- Made the org-wide case for API-first, moving DocSend (~45 engineers) from ad-hoc AJAX calls (informal JSON, sometimes carrying HTML) to a typed client data layer built on GraphQL, codegen, TypeScript, and React Query for caching, invalidation, and optimistic updates. When the first proof of concept met organizational resistance, I framed the transition as an experiment with a rollback plan and quarterly engineering satisfaction surveys. After about a year of running both approaches, the org committed. All new data fetching and mutations now go through formal APIs, and most legacy pages are pure React. The result is fewer incidents, fully documented APIs, and more efficient use of engineering time.
- On my own initiative, created DocSend’s developer experience metrics system, tracking boot time, frontend compile time, GraphQL codegen time, and other workflow timings in AWS CloudWatch. Caught and reversed multiple performance regressions before they slowed the team.
- Conceived and drove DocSend’s org-wide move to a Yarn workspaces monorepo with explicit package boundaries, enabling dependency-aware CI that builds and tests only affected packages, giving teams clear ownership and a system that's easier to reason about.
- Retired the legacy Rails asset pipeline (Sprockets), saving about 730 engineer-hours a year.
- Tech lead for several DocSend teams. Created and ran engineering education sessions on advanced debugging and performance profiling, widely attended across the org, and led a recurring deep-dive group for engineers. Mentored engineers across levels through design review, pairing, and regular 1:1s.
- Replaced DocSend’s bulk-download workflow (background zip jobs, a polling modal, and emailed expiring links) with one click and an immediate download. Built zip-relay, a Go/gRPC service that streams files from S3 into a zip archive directly to the user’s disk, with no delay, no intermediate storage and almost no memory use.

Google – Software Engineer, Search

Mountain View, CA | Mar 2021 – Nov 2021

- Built a query language and engine that let engineers analyze massive log datasets and pull out targeted insights.

SecureDocs – Principal Software Engineer

Goleta, CA | Oct 2017 – Mar 2021

- Designed serverless workflows on AWS Lambda and Kinesis for large-scale document processing.
- Built and maintained the GraphQL API (Ruby/MongoDB) that gave all products a single access layer.
- Cut CI/CD build times from 90 to 15 minutes and per-build cost to $0.25 using Terraform, Docker, Drone.io, and AWS autoscaling.
- Rebuilt the e-signature product to support complex workflows, and wrote a SAML service provider that hundreds of enterprise customers adopted.
- Prototyped a migration from MongoDB to Postgres that solved the “dual-write” problem and gave us transactional guarantees.
- Mentored junior engineers and worked directly with customers on escalations.

RightScale – Senior Software Engineer

Santa Barbara, CA | Aug 2010 – Oct 2017

- Led a team of 8 to 12 engineers through a multi-year refactor of a core component that had become unmaintainable, restoring stability and making iteration safe.
- Created the Global Object and ACL services (Ruby/Postgres) that handled identity, authorization, and authentication across global-scale systems.
- Containerized legacy systems, cutting infrastructure costs by 30%.
- Designed the New Server Wizard, used to launch millions of customer cloud instances.
- Built the Network Manager UI for managing cross-cloud networking resources.
- Implemented the i18n strategy that opened up sales growth in Japan.

The Fresno Bee – Web Developer

Fresno, CA | May 2006 – Aug 2010

- Built newsroom publishing software for election results, weather/air quality data, and GIS crime maps.
- Developed and maintained a high school sports statistics database in PHP/MySQL.

Education

California State University, Fresno — B.S. Computer Information Systems (2007)

Leadership & Community

- Open source software contributor
- Eagle Scout
- Private pilot & wilderness enthusiast