

I am a product-oriented engineering manager. My multifaceted career has been driven by the desire to close the distance between my engineering work and the customer experience. From my time as a sysadmin starting 25 years ago, during my web operations experience at e-commerce and fintech companies, while designing systems to operate reliably at scale, through crafting engineering teams and processes to deliver software and systems I have learned to combine people management, knowledge of scalable infrastructure, and product development into one clear mission statement: engineering *is* the product.

Whether shepherding a complete rewrite of the frontend and backend for a 1-million user (MAU) web consumer app, designing a new SaaS product's operational footprint to scale from day one, or shipping enhanced testing solutions to streamline developer experience I distill business strategy into engineering direction and deliver delightful products for customers.

Experience

Lumos Labs - Engineering Director

10/2020 - Present

- Developed an execution strategy using personas and user story mapping, that improved the engineers' delivery capability as they rewrote our core consumer web app. **We shipped an early version of the web app to India and the Philippines.**
 - Working in 1-week cycles, the team increased velocity from **1 feature per month to 2 features delivered roughly every 2 weeks.**
- Shipped important medical and research products that served our [long-term strategy](#) to expand into more markets, including:
 - A fully-documented backend for an 18-month FDA-reviewed clinical trial to **validate a potential ADHD digital therapeutic.**
 - A web application for **an active double-blind study of 10,000 participants** to detect biomarkers that might support early diagnosis of multiple sclerosis.
- Reshaped the interview process to extract stronger signal from candidates in fewer cycles, **growing the web and platform teams from 2 engineers to 8** in an extremely competitive talent market.
- Managed, coached, and promoted **15 engineers** across a breadth of specialties including data engineering, infrastructure, web and backend development, and Corp IT.
- Created and staffed a security and compliance function to manage our bug bounty program, provide regular training, and to shape early controls ahead of bringing a digital therapeutic product to market.

Jeli, Inc. - Co-founder and CTO

8/2019 - 9/2020

- Laid the technical foundation for cloud-first development of a product that aids teams learning from their software incidents. Combined 12-factor application principles, containerized workloads, and AWS services like ECS in a strategy to minimize operational overhead and focus on delivering valuable features.
- Established an early security and compliance program to position the company for a SOC 2 Type 2 attestation that would appeal to early customers.

Bloomberg, L.P. - Senior Software Engineer

3/2017 - 8/2019

- Managed projects, provided architectural guidance, and engineering expertise to develop a storage automation project that reduced a request backlog from 1 week to 1 day and eliminated a \$1M service contract.
- Designed and implemented a CI platform supporting 4 operating systems, configuration management solutions (Chef, Salt) and multiple projects written in Python, Ruby, and Go. After onboarding 100 repos in 3 months, engineers and management were more confident in their updates, detecting common/recurring bugs, and following consistent testing practices.

Etsy, Inc. - Staff Operations Engineer

1/2013 - 3/2017

- Partnered with product teams to help them focus operational effort in support of their work including preparing feature launches and honing reliability practices. By describing a minimum set of required outcomes and training to realize them, I provided a clear roadmap to teams that enabled them to consistently deliver reliable features.
- Led architecture reviews, operational readiness efforts, and facilitated incident debriefings to drive an holistic approach to systems thinking and continuous learning.
- Contributed open source tooling in the monitoring space and encouraged the industry to think differently about alert design and the on-call experience.

Conifer Health Solutions (Tenet Healthcare) - Technical Services Director

1/2004 - 1/2013

- **Established and grew an Engineering team (0 to 10)** to build and operate the infrastructure powering healthcare products such as:
 - Online enrollment for dental, medical, and vision plans.
 - Third-party administration of dental, medical, and vision claims via LuminX.
 - Data warehousing and ETL processing for predictive analysis of plan costs.
 - Medical case management and care coordination delivered by clinicians (RNs) nationwide.
- Collaborated with facilities management to build and expand on-premises data center operations.
- Provided all telecommunications management including bundling T1s, PSTN lines, and a VoIP-based unified messaging platform to deliver both our online presence and toll-free based services for over 100 customers.
- Drafted, performed, and audited all necessary technical controls to maintain HIPAA compliance on an annual basis.

Ebix Health - Senior System Administrator

10/1998 - 1/2004

- As a value-added reseller, we bundled our medical claims-processing software (LuminX) with nearly every version of proprietary UNIX (AIX, HP-UX, Solaris, Tru64), Linux, and Windows.
- Provided post-sales engineering design, implementation, and ongoing support to customers. The scope of this work included:
 - Integrating with their existing backend infrastructure.
 - Rolling out front office workstations (Windows NT and 2000) and scanning stations to generate OCR images of paper claims.
 - Implementing short- and long-term storage (disk and WORM media, respectively) that satisfied regulatory requirements.

Miscellany

Conference Presentations

I am fascinated by the prospect of people using computers to augment their activities during incidents. I've given several presentations on tooling I've built to support on-call engineers, alert design, and how we might apply concepts from Cognitive Systems Engineering to improve the state of the art.

- [Designing Alerts to Direct Attention](#) describes Cognitive Systems Engineering concepts and their application in designing alerts.
 - <https://ryanfrantz.com/talks/designing-alerts-direct-attention/>
- [It's 3AM, Do You Know Why You Got Paged?](#) dives into alert design and ways we can aid on-call engineers' ability to orient themselves. I introduce nagios-herald and illustrate how it applies these ideas.
 - <https://ryanfrantz.com/talks/3am-why-you-got-paged/>
- In [Mean Time to Sleep](#), a colleague and I discuss quantifying the on-call experience and tooling we've built to aid engineers.
 - <https://ryanfrantz.com/talks/mtts/>

Blog Posts

I write occasionally. These are some samples of my posts.

- [Engineering Ownership](#)
- [Complexity is a By-product of Success](#)
- [Incident Analysis and Chaos Engineering: Complementary Practices](#)
- [Remote Incident Response](#)
- [When Does an Investigation End?](#)
- I've also collected [thoughts on software engineering](#) that I occasionally update.

Open Source Software

I've open-sourced a few tools I hoped might be useful to others.

- [nagios-herald](#) is a project that supports adding context to alerts to help orient on-call engineers.
 - See <https://github.com/etsy/nagios-herald>
- [chef-umami](#) provides a low-friction way to get started writing tests for Chef cookbooks by doing it *for* you!
 - See <https://github.com/bloomberg/chef-umami>