I'm seeking engineering management (director-level and above) roles to continue **progressing toward becoming a CTO**. I'm interested in well-established companies looking to improve their engineering processes and startups that have found product market fit and need to scale. I'm an engineering leader by trade, a translator by practice. I distill business strategy into engineering direction and convert engineering outcomes into business value.

A sample of my achievements includes delivering the backend for a long-running, FDA-reviewed, clinical trial; shipping a backwards-compatible authentication solution for a 1-million-user consumer application; kickstarting a security and compliance program, targeting SOC 2 compliance, to position a SaaS startup for enterprise customers; building a cross-platform CI rig, and related tooling, to support development of products that impact global financial markets; designing and managing the architecture necessary to operate a medical management company's nationwide mission of raising the bar for patient care and simultaneously reducing total healthcare costs.

I dive into my roles, identifying key outcomes, and prioritizing work to deliver the team's mission. When the path is clear I'm a force multiplier; in the face of ambiguity I set a course. I do the hard work, the necessary work. And I create the conditions necessary to support focus, so that we work on the right thing at the right time.

## Experience

## Lumos Labs - Engineering Director

### 10/2020 - Present

- Developed an execution strategy, with the Head of Product, that improved the engineers'
  delivery capability and increased team velocity as they rewrote our core consumer app. We
  shipped an early version of the web app to India and the Philippines.
  - Working in 1-week cycles, the team **doubled their output in the first 2 months**.
- 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 and **hit all of our hiring goals** in an extremely competitive talent market.
- Managed, coached, and promoted engineers across a breadth of specialties including data engineering, infrastructure, web and backend development, security, and Corp IT.

### 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 the SRE and Corp IT teams that built and operated the infrastructure for the following products (largely for self-funded health plans):
  - Online enrollment for dental, medical, and vision plans.
  - o Third-party administration of dental, medical, and vision claims via LuminX.
  - o Data warehousing and ETL processing for predictive analysis of future costs.
  - Medical case management and care coordination delivered by clinicians (RNs) around the country.
- 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 controls to maintain HIPAA compliance within my area of responsibility.

## 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 to be processed.
  - 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