I'm an engineering leader by trade, a translator by practice. I distill business outcomes 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.
  - 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 - Technical Services Director (Previously InforMed, LLC)

1/2004 - 1/2013

- Established and grew a Systems Engineering team to support the long-term technical needs of the clinician, customer service, and claims administration departments. We built and implemented low-friction solutions that supported the mission of providing high-quality care at reduced costs.
- Built a Support Desk team, setting service levels for response time and quality, to provide regular assistance to clinicians spread across the country.

#### Ebix Health - Senior System Administrator

10/1998 - 1/2004

• Provided post-sales engineering design, implementation, and support to customers including managing onsite customer installations across a range of platforms.

# 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