# **Isaac Sparling**

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I leverage a breadth of experience as a founder, a people manager, and an individual contributor to build well-scoped, resilient systems for B2B and B2C companies. I thrive in fast paced environments, and bring a collaborative approach by focusing on progressive delivery and celebrating wins across the organization. Move fast and *heal* things.

# **Experience**

## **EIGS Consulting**

#### Engineering Process & Devops Consultant • May 2023 — Present

Leverage deep experience with startups across their lifecycle to help clients make the turn from "scrappy" to "professional software organization."

- Coach founders on hiring, empowering, and retaining top managerial and individual-contributor tier talent from across the globe
- Collaborate with business, product, and engineering to understand current needs and prior trade-offs made
- Migrate clients from hand-rolled (downtime required) release processes to continuously integrated and deployed release cycles, facilitating future moves towards blue-green, dynamic feature flags, and more
- Enable engineering best practices by hoisting pre-production integration environments
- Work with sales and business stakeholders to build quick, structural wins in support of their best practices
- Deploy observability tooling and train clients on how to use it to better understand business health and drive product decisions
- Build SLOs and SLIs to help teams evaluate application health
- Refine on-call practices to give teams breathing room and mitigate burnout

#### **Underwritr**

#### Founding CTO • Aug 2022 — May 2023

Prototyped and launched an actively-updating B2B business credit report built specifically for SMEs. Built with data owned, controlled, and commonly shared by business owners; an Underwritr report allows small private enterprises to be evaluated similarly to their public counterparts.

- · Built a resilient, service-oriented, and event-driven ETL pipeline to re-derive weighted credit scores
- Maximized engineering velocity by sourcing and hiring contractors to implement resilient services
- Isolated specific customer needs from business requirements; ensured parity via behavior driven regression tests implemented in Playwright
- Trained engineers and semi-technical business people in triage best practices using Honeycomb.io
- Used a <10min deploy pipeline and an observability-driven-development practice to keep tight feedback loops between customers and product/engineering, enabling lightning-fast iteration in search of PMF

# **Nurx & Thirty Madison**

#### Head of SRE (Internal Tools & Developer Platform) • July 2021 - Aug 2022

Led globally distributed SRE teams (Internal Tools, Infrastructure, Developer Platform) to build tools for monolith maintenance while facilitating its deconstruction into a robust, eventually-consistent service oriented architecture.

- Closely collaborated with Principal Engineers to set strategy for breakdown of startup monolith into a scalable, service oriented architecture
- Facilitated the merge and re-org of two engineering teams (systems, vendors, cultures, deployment architectures, etc) through the course of the Nurx and Thirty Madison merger/acquisition
- Maintained budgets & built 24 month projections for entire infrastructure sub-org

- Systemized incident response by tracking costs, impacts, mean time to resolve. Led creation of runbooks, and advocated for product-level fixes to the most common issues
- Collaborated with business and product stakeholders to communicate incident impacts and ensure all information required for external communication was available
- Designed and implemented team-based on-call rotations, enabling a "you build it, you run it" culture
- Work with teams across organization to define SLOs and SLIs relevant to their specific domains
- Rapidly generated support for org-wide OpenTelemetry adoption by building first integration, and demonstrating power of feeding that into Honeycomb.io
- Socialized resilience practices across org with open-to-all office hours (attended by technical and non-technical folks alike)
- Managed relationship with SOC2 auditors; led data-collection efforts in support of controls to get full soc2 type2 certification
- Gave formal semi-annual performance reviews in addition to weekly mentorship, coaching
- · Negotiated vendor contracts

## **Rumbleship Financial**

CTO, Cofounder • May 2016 - Oct 2021

Built the first BNPL ("Buy Now Pay Later") for B2B & wholesale from the ground up. Hired and guided team to successfully underwrite and manage invoices for 25,000+ underserved SMEs with a <20bp loss rate.

- Grew team to 15 diverse engineers at all stages of their careers
- Transitioned proof of concept prototype into a scalable, robust, and eventually-consistent serverless system
- Partitioned monolith into logical services, all built on top of a unified backend framework that provided GraphQL over GCP PubSub communication between microservices
- Designed and deployed ReBAC authz framework (similar to Zanzibar) that empowered less experienced engineers to confidently work with a multi-tenant customer graph
- Retired unstructured logs in favor of OpenTelemetry instrumentation spanning a distributed GraphQL/TypeScript service stack
- Built a multi-party balance resolution engine (non-blockchain-leger), prioritizing speed and immutability. Released, backfilled with 3.5 years of historical transaction data, with no impacts to customers
- Automated data collection and approval processing for underwriting, while actively surfacing business edge
  cases to CSRs, so the majority of applicants could onboard in ≤5min
- Built/maintained ACH gateway integrations with 3 different banks (and, incidentally, black-box diagnosed problems with their parsers)

#### WithMe

Director Supplier Relations • Dec 2014 - Feb 2016

Facilitated acquisition, enabling product team to take over development of the Rumbleship Marketplace. Brought technical know-how into a growing sales organization.

# **Rumbleship B2B Marketplace**

Cofounder • Aug 2013 - Dec 2014

Rumbleship Wholesale Marketplace leveraged the ethos of consumer shopping experiences to massively simplify the wholesale ordering process for both suppliers & retailers. Acquired by WithMe, Dec 2014.

# **OKCupid Labs**

Software Engineering • Aug 2012 - Aug 2013

Rails Engineering Lead

- Transitioned legacy PHP dating site singlesnet.com into kiss.com
- Prototyped various other projects in the dating sphere

#### **VMWare**

Member of Technical Staff • Jun 2011 — Aug 2012

Trained new engineers in the Socialcast codebase post acquisition.

• Worked extensively with product and sales to bring the product up to spec for VMWare enterprise needs

#### **Socialcast**

#### Software Engineer • May 2010 — June 2011

Full stack rails developer building features across the codebase.

- Rebuilt authorization to use a role based authorization system
- Deployed i18n framework to entire application

### **Skills**

#### Languages & Tools

GraphQL, OpenTelemetry, Honeycomb.io, DataDog, Sentry, TypeScript/JavaScript, mysql, postgresql, CircleCI, Github Actions, e2e (playwright, cypress), GCP (GAE, Google Pub/Sub, Secrets Manager, CloudSQL, firebase hosting, stackdriver), AWS (Lambda, SQS, Secrets Manager, SSM, Parameter Store, CDK, RDS, Aurora, Cognito, EKS, Fargate, dynamodb), networking, linux, macos, bash, zsh, sst.dev, linux, bash, zsh, shell scripting, orbstack, docker, k8s, terraform, auth0, React, Vue, html, css.

#### Domain Modeling & Event Storming

Clear understanding of the business domain at hand is critical for both implementing a system as well as leading a group of people to implement it. I've coordinated and led Event Storming sessions with subject matter experts varying from accountants to doctors and nurse practictioners to ensure the correct *structure of the business* is represented in systems being built.

#### Incident Response & Reconciliation

I thrive in the pressure cooker that is an incident. Once resolved, I excel at working with the business to ensure priority for *structural* fixes. By mitigating thrash from the pager, my teams have been able to deliver more value to the business more quickly, in turn, ensuring the highest quality of service is delivered to customers.

#### Organizational Leadership

I've led agile engineering organizations in both management and individual contributor capacities. I inspire teams to lean on each other and reach beyond what they could do individually. I have mentored engineers, built consensus across business units, and cheered for folks to do their best without overextending themselves.

## **Education**

## **Macalester College**

#### Bachelor of Arts, Computer Science

- Published (Mathematical Intelligencer): <u>Through the Looking-Glass</u>, and What the Quadratic Camera Found There
- Published (IUI'11): Macademia: Semantic Visualization of Research Interests
- Honors Thesis: Cognitive Load of Rating Scales
- Graduated with Honors, Upsilon Pi Epsilon

## **Outside Interests**

- Bicycles (retired semi-pro road racer, current ultra-endurance mountain biker)
- Audiophile (sound systems, audio engineering, obtuse electronic music)
- Ergonomics (from mechanical keyboards to macros to optimizing tire selection)
- Modern art and design