

## Profile

- Experienced **Senior Software Engineer** with a proven ability to innovate and deliver new products
- Heavy focus on Ruby / Rails, cloud operations (AWS), databases, scalability, search / NLP, testing applications (RSpec, Test Unit / Functional) and Agile methodologies.
- Skilled in Ruby, Rails, AWS, API Development, Docker, DevOps, Ansible, Stripe API, ElasticSearch, Elixir, PHP, MySQL, Postgres, Redis, Sidekiq.
- Extensive experience both deploying and administering Rails applications using tools such as Capistrano, Ansible, Phusion Passenger, Vlad, Git and Docker.

## Experience

### Senior Software Engineer

2018 to present

**Stack:** Rails / Postgres / AWS / SideKiq / Redis / Ansible / RSpec

- Senior Engineer focused on scalability, deployment and cloud operations for a large provider of education software.
- Chose Ansible as the cloud management tool of choice and trained other engineers on it
- Rewrote deployment and provisioning from Puppet & Chef to Ansible
- Did cost analysis and rightsizing recommendations to minimize cloud expenditures
- Wrote a variety of automated ansible scripts for health checks and regular box maintenance
- Rebuilt all EC2 infrastructure with autoscaling policies to save costs
- Moved all critical processes (Unicorn/SideKiq) to systemd improving reliability
- Found and removed over 70 terabytes of unused/orphaned EBS volumes saving substantial costs (several thousand per month)
- Optimized Postgres database for better performance
- Built Student Integration System API for improving API handling using a functional approach in Ruby
- Built an OAuth 2.0 client to integrate with new State of California CalPads initiative
- Mentored junior engineers on an ongoing basis along with regular code reviews and pull request triage

### Seas Education

Mountain Home, AK

### Architect

2015-2017

**Stack:** Rails / MySQL / AWS / ElasticSearch / Ansible

- Led all development activities for FI Navigator, a leading provider of financial information for the banking industry.
- Fully responsible for all DevOps including moving existing systems onto AWS,
- Developed a multithreaded data science pipeline for performing analytical calculations,
- Developed a multithreaded crawler for dealing with data capture from a diverse community of websites spanning a range of technology standards from today back to the start of the web.
- Built a categorization engine for dealing with HTML micro expressions and inferring relationships from them.

### FI Navigator

Atlanta, GA

### VP Engineering

2014-2015

**Stack:** Rails / MySQL / ElasticSearch / Chef

- Led all software engineering and operations for AppData, a SAAS application that provided information about mobile applications,
- Developed extensive analytical and graphing tools,
- Scaled the AppData application from start (5,000 apps; single app store) to finish (6,000,000 plus apps; five app stores using a custom written crawler / indexer).

### AppData, LLC

Raleigh, NC

## Consulting Software Engineer

2010 – Present

Assorted  
Telecommute

Remote software engineer for many different projects including:

- **MDDX.** Helped bring a large medical Rails app into full test coverage before a new release. **Stack:** Rails / Angular / RSpec.
- **Interana.** Implemented a SAML authorization system that offered Single Sign ON (SSO) across multiple customer facing applications. Accomplishments include: SAML authorization backend, Interfaces to Lithium and MindTouch customer support tools, Cross repository search engine, Ansible and AWS for DevOps. **Stack:** Rails / AWS / SAML
- **TheraChat.** Helped focus a digital health company away from fitness bands towards tools for psychotherapists. Implemented APIs for mobile application to talk to back end server doing Natural Language Processing (NLP) for topic extraction. **Stack:** Rails / Docker / Elasticsearch / PHP / Google Play
- **Sigstr.** Senior Engineer focused on internal code sharing tools as well as a cloud based email transformation engine for expanding the core Sigstr email marketing service. **Stack:** Rails / MongoDB
- **MDDX.** Built a prostate cancer diagnostic system from the ground up based on an evidence based medicine approach combined with mathematical analysis of input data. Full admin tools for creating medical knowledge bases in a hierarchical structure. Custom report writer allows medical professionals to generate new reports on the fly. **Stack:** Rails / MySQL / RSpec
- **Inside Network Store.** Implemented a cross site store front and subscription service to provide authentication, authorization and recurring billing services across multiple web sites using a JSON API. Supported growth of multiple paid subscription products using a common API across platform (WordPress, PHP app, Ruby app). **Stack:** Rails / MySQL.
- **Inside Network AppData.** Ported an existing data analytics package from PHP to Ruby on Rails and extended its functionality with new graphing, data editing, large scale email delivery and spam blocking. Created custom multi threaded crawlers written in Ruby to handle millions of new objects per day from multiple data sources. **Stack:** Rails / Elasticsearch / MySQL.
- **LinkedIn, Inc.** Optimized the back end of the CardMunch application including database schema changes, index optimizations, using New Relic for bottle neck analysis, code restructuring and formal load testing and analysis using Trample. Implemented test coverage using RSpec and RCov. **Stack:** Rails / Postgres / TestUnit
- **EZ Publishing, Inc.** Enhanced an email marketing system, www.streamsend.com, with additional features including extensive use of the Facebook API for content sharing, publishing and wall posting. Comprehensive test coverage using RSpec. **Stack:** Rails / MySQL / RSpec
- **LiveText, Inc.** Completed a large scale educational testing and scoring application for the state of Washington. Starting from zero test coverage, led implementation of an RSpec test suite to bring a 20,000 lines of code Rails app to 85% coverage over a one month period including models and controllers. **Stack:** Rails / MySQL / RSpec
- **HowAboutWe.** Helped transition a new code base from a consulting firm to an internal engineering team with a focus on optimizing back end database performance and adding full test coverage through RSpec to bring a 10,000 lines of code Rails app to 70% coverage in a two week period. **Stack:** Rails / MySQL / RSpec
- **Trazzler.** Implemented a Ruby on Rails and JavaScript based Smart Phone application (iPhone & Android) using the new Geo-positioning APIs to serve resources dynamically based on location. **Stack:** Rails / JavaScript

## Vice President of Engineering

2007-2010  
**Stack:** Rails / MySQL / TestUnit

eduFire, Inc.  
San Francisco, CA

- Remote executive and software engineer for a Ruby on Rails-based live video learning website.
- Worked as part of a pair programming team in a test-driven development environment.
- Helped set overall strategy at corporate level, participated in fund raising and served on the eduFire board.
- Helped raise \$2 million A round

## Founder, Vice President of Engineering

2006-2007

Ookles, Inc.  
Indianapolis, In

- Founded Ookles, Inc., a next generation media-sharing site for family photos and videos.
- Wrote custom PHP framework to speed development

**Founder, Vice President of Engineering**  
2003-2006

**Feedster, Inc.**  
San Francisco, CA

- Created the leading search engine for RSS / XML content including blogs, podcasts, news feeds and more.
- Built and scaled Feedster using a LAMP architecture from 50 initial indexed feeds to more than **18 million feeds**.
- Led development of all front-end coding, MySQL Schema and portions of back-end architecture.
- Helped raise seed round from a series of angel investors followed by a \$4 million A round

**Principal / Senior Consultant**  
2001-2003

**The FuzzyGroup, Inc.**  
Nahant, MA

- Worked with different clients on a variety of technical and strategic projects.
- Created CMI TrackiT, a post 9/11 software application for providing email notifications for the movement of hazardous waste.
- Presented, blogged, trained, and wrote about PHP programming.
- Served as Technical Editor for Sams Publishing.

**Vice President of Engineering**  
2000

**Mascot Network**  
Cambridge, MA

- Managed an engineering department of 35 – 45 employees including full-time and contract employees.
- Led implementation of a next generation Internet community platform for college students.

**Founder, President**  
1999

**Net Services Corp**  
Lynn, MA

- Founded Net Services Corp to create an Internet-based business-to-business exchange focused on sharing employees between companies.

**Chief Technology Strategist**  
1996-1999

**Dataware Technologies, Inc**  
Cambridge, MA

- Led all Product Management activities for Dataware Knowledge Management System (KMS), a web enabled application designed for enterprise organizations to optimize their productivity in knowledge-intensive areas.

**Co-founder, Vice President of Marketing**  
1987-1996

**NTERGAID, Inc.**  
Milford, CT

- Co-founded NTERGAID to create a suite of hypertext / hypermedia tools for online publishing.
- Led all Marketing and Product Management activities for the HyperWriter electronic publishing system.

## Education

**B.S., Cum Laude, 3.4 GPA**  
May 1990

**University of Bridgeport**

- Major in Management. Selected as the year's "Best Management Student" (1989/1990 academic year).
- Dean's List for last two years of college.

## Books Written

**Blogging Essentials** by O'Reilly & Associates, 2002.

**The Digital Publishing Construction Kit** by John Wiley & Sons, 1996.