

EXPERIENCE

**Narrative Science**

Chicago, IL

*Senior Software Engineer, DevOps Team Lead*

December 2015 — Present

- Reduced infrastructure complexity and risk by standardizing around a single OS distribution and fully specifying all host configurations using *Ansible*, resulting in a uniform and fully-reproducible infrastructure
- Designed and directed implementation of on-premise packaging of *Quill 2* SaaS platform, enabling sales of existing software to many new customers
- Designed the build, release, and deployment processes for *Quill 3* to support fast, zero-downtime deploys, continuous integration, simple hot-patching, and uniform tooling for both SaaS and on-premise installations
- As a leader, cultivated and disseminated engineering standards and best-practices to improve the quality and value of software produced by the organization

*Data Engineer*

December 2013 — December 2015

- Designed, implemented, and deployed analysis pipelines to transform client data into payloads usable by *Quill* natural language generation suite using *Python*, *Pandas*, and *Apache Hadoop*
- Lead development of in-house documentation toolkit during company hackathon resulting in first place award; this toolkit was later deployed organization-wide, enabling major process improvement
- Created a heavily documented object-oriented framework for composing data pipeline applications, resulting in vast productivity enhancements across the engineering organization

**Esqyr**

St. Louis Park, MN (Remote)

*Cofounder, Software Engineer*

May 2014 — Present

- As a product developer, designed a software solution for administering the sale and delivery of Bar Exam preparatory materials to law students
- Implemented a mobile-responsive e-commerce web application with an *AngularJS* front-end, backed by a *Python RESTful* API with a *PostgreSQL* normalized relational data store, deployed with *Ansible*.
- Implemented a comprehensive test suite providing >91% statement/branch coverage comprising >50% project SLOC.
- (consider adding a bullet about how product development and implementation occurred in setting w/ two non-technical, non-software type people, with emphasis on exploiting good communication skills)

**The CareGiver Partnership**

Neenah, WI (Remote)

*Software Engineer*

October 2009 — December 2013

- Facilitated full-scale reimplementations of web application platform software from *VB.NET* to *Python/Django*.
- Realized tens of thousands of dollars in yearly savings by virtualizing server operations using commodity *Linux* VPS hosting.
- Implemented and supported a unified E-commerce, CRM, batch distribution/fulfillment, and reporting software platform
- Conceptualized and created a domain-specific guided search tool using *AngularJS*—*The Incontinence Product Finder*—enabling customers to more easily find and purchase product

**SeatSync**

Chicago, IL

*Cofounder, Lead Software Engineer*

January 2012 — November 2013

- Designed a P2P, location-aware ticket exchange platform including real-time chat
- Created a suite of unit tests providing coverage of data-model and HTTP APIs
- Implemented and extensively documented an HTTP API in *Python*
- Designed and implemented *Android* client software; supported development of *iOS* client software
- Created platform analytics package making use of *scikit-learn* and *matplotlib*

**EDUCATION****University of Wisconsin, Madison**

Madison, WI

*Bachelor of Science, Computer Science*

May 2009

- Notable courses include Computer Graphics, Operating Systems, Bioinformatics, and Linear Algebra
- Worked at *Internet Scout Research Group* as a software developer; created custom CMS software for *UWAMIC* consortium using *PHP*

**PROFESSIONAL  
INTERESTS**

- Created an audio spectrum visualizer using *Rust*; implemented the *Cooley-Tukey* FFT algorithm, *Hamming* window function, and a *pulseaudio* foreign function interface
- Implemented a Quadtree-based spatial image storage mechanism allowing logarithmic-time storage and retrieval of application data on key-value stores
- Earned a statement of accomplishment from *Coursera* for Cryptography I taught by Dan Boneh
- Earned a statement of accomplishment from *Coursera* for Machine Learning taught by Andrew Ng