

PROFILE

Hello! I am a senior software engineer looking for a new full time role. I specialize in designing and building stable, scalable consumer-facing websites and refactoring large codebases. I believe in constantly improving code, infrastructure and process to make quality products that consumers and engineers can enjoy and rely on.

EXPERIENCE

- **Tricky Think LLC (Software Consulting)** Washington D.C.
Founder September 2015 - April 2016, November 2017 - April 2018
 - **Arcadia Power:** Deployed an AWS based Prometheus + Grafana monitoring system, incorporated it with multiple applications, and educated the team on dashboards and monitoring. Prototyped next generation utility scrapers that use PDF OCR instead of HTML processing .
 - **Analytics Pipeline:** Built an analytics pipeline for a client using AWS Lambda, Firehose and Redshift to track effectiveness of e-commerce referrals promoted through advertising campaigns. Using this stack, the cost effectiveness of new campaigns could be analyzed in Tableau graphs in minutes.
 - **Ottoneu Fantasy Sports:** Worked with Ottoneu to refactor their real time auction draft system to increase stability and support four times as many users without additional hardware. We also containerized their development environment using docker-compose to make on boarding new developers easier.
- **Vox Media** Washington D.C.
Principal Full-Stack Engineer Jan 2011 - March 2015, April 2016 - April 2017
 - **Continuous Integration (CI) Infrastructure:** Designed and led the migration to a comprehensive CI ecosystem for 30+ applications using Jenkins, Docker and Chef. Reduced test suite run time from 25 minutes to 10.
 - **Syllabus Live Blog:** Built a live blogging platform backed by Amazon S3 for The Verge that handles 1.2 million unique users during iPhone events. Click to read a blog post with more details.
 - **Ruby and Rails Upgrades:** Upgraded a monolithic Rails app with 81k+ lines of code from Ruby 1.8 and Rails 2.3 to Ruby 2.1 and Rails 3.2 with no downtime. Click to read a blog post with more details.
 - **Image Processing:** Migrated all image processing in the Vox Media CMS to use the open source Thumbor project. Profiled and optimized performance issues in order to support resizing 1.3+ million images a day. Contributed several pull requests written in Python and C back to the main project.
- **The Human-automation Interaction and Cognition Lab** Ann Arbor, MI
Simulation Developer May 2010 - August 2010
 - **Anesthesia Simulation:** Designed and developed a simulated anesthesia tool-set (ventilator, vital signs display, drug table, etc) for use in an industrial engineers PhD research. Wrote it in C++, it used four touch screen monitors for input and networked with another computer that simulated the operating table.
 - **Research Database Management:** Created and maintained a MySQL database for analysis of simulation data for an industrial engineering PhD candidates research. Wrote an AJAX/PHP web interface to batch upload/parse data, and generated data analysis per research requirements with PHP and SQL queries.

TECHNICAL SKILLS

- **Languages and frameworks:** Ruby with Rails and Sinatra, Python with Django and Tornado, Bash, Go, Javascript via Node.js, PHP
- **Technologies:** Docker, AWS (EC2, S3, Cloudfront, Lambda, Firehose, SES, Elastic Beanstalk, CloudBuild), Heroku, Varnish, Chef, Ansible, Git, MySQL/Postgres, Redis, Jenkins, Nginx, Elasticsearch, WebPageTest, Thumbor, Grafana, InfluxDB, StatsD

EDUCATION

- **University of Michigan** Ann Arbor, MI
B.S.E. in Computer Science Engineering 2010