

WORK EXPERIENCE

Senior Software Engineer Control4

03/2016 – Present

Orange County, CA

I worked as a lead software engineer, consolidating disparate remote monitoring and management systems across Control4.

Achievements/Tasks

- Designed modern blue/green continuous delivery pipelines in Jenkins, reducing cycle time from being measured in days to being measured in minutes.
- Reviewed A/B testing services and instrumented products with A/B testing capabilities, enabling data driven decision making.
- Worked with modern tech stack using Docker and AWS: Lambda.

Software Developer Pakedge

05/2014 – 03/2016

Orange County, CA

I worked as a full stack software engineer on tools which provided remote network monitoring and management capabilities to Pakedge dealers.

Achievements/Tasks

- Converted single-server application failing under load to several independent horizontally scaling cloud services, solving critical performance issues and allowing the service to grow to monitor hundreds of thousands of devices.
- Built an automatic network topology discovery tool and a network visualization tool which supports drag and drop definition of network connections, zooming, panning, coloring of edges, and tree collapse/expand, saving hours of time for dealers tracking port to port connections in their installations.
- Optimized page load times by setting up source minimization, compression, and caching and by optimizing database queries, bringing a website from a poor grade to a great grade according to site speed auditing tools.

EDUCATION

Computer Science Golden West College

Superseded by self-study, including but not limited to:

- MIT OpenCourseWare, KhanAcademy, and PluralSight courses.
- Arxiv papers, high quality blogs, and technology podcasts.
- AI and ML books like Programming Collective Intelligence, Deep Learning, Deep Learning with Python, Paradigms of Artificial Intelligence Programming: Case Studies in Common Lisp, and Artificial Intelligence: A Modern Approach.
- Software engineering books like Continuous Integration, Code Complete, Accelerate, and Introduction to Algorithms.

SKILLS

Machine Learning

DevOps

Data Visualization

Full-Stack Engineering

Web Development

PROJECTS

readthedocs (Python)

- Helped maintainers of the popular ReadTheDocs website migrate their Django webapp to a long term support release.

findfn (Clojure)

- I wrote the findfn plugin for a popular #clojure IRC bot. When you give it an example of what a function is supposed to do, it tells you what function does. It's enjoyed a small measure of popularity and has been extracted by others into both a standalone library and a website.

Numerous Miscellaneous Projects

- A remote controlled car.
- Chat bots for a proprietary video chat platform.
- A site which ranks teachers via Elo.
- PageRank search over fanfiction.net stories.
- ML systems which learn to play simple games.
- A blog where I occasionally post about software engineering and AI.
- And more, but I'm trying to keep this to one page.

LANGUAGES & TECHNOLOGIES

Python	●	●	●	●	●
Clojure	●	●	●	●	○
Javascript	●	●	●	●	○
Java	●	●	●	●	○
C++	●	●	●	●	○
AWS	●	●	●	●	○
D3.js	●	●	●	●	●
keras	●	●	●	●	○
Jenkins	●	●	●	●	○
SQL	●	●	●	●	○
Twisted	●	●	●	●	●
matplotlib	●	●	●	○	○
numpy	●	●	●	○	○