

Clark Zinzow

Recent graduate of University of Wisconsin-Madison with a B.S. in Math & CS, seeking a full-time SWE position involving machine learning.

Madison, WI - Email me on Indeed: [indeed.com/r/Clark-Zinzow/4c608cbbc940e2ec](https://www.indeed.com/r/Clark-Zinzow/4c608cbbc940e2ec)

A recent graduate of University of Wisconsin-Madison, earning a Bachelors of Science in Mathematics and Computer Science, with an avid interest in taking on challenging projects - whether it be in a research, entrepreneurial, professional, or recreational capacity - and I am currently seeking a full-time software engineering position for which I can leverage my interests in one or more of the following: machine learning; distributed systems; computer vision; real-time systems; parallel computing; optimization; cloud-computing; data/numerical analysis.

Research interests include:

- Applications of deep reinforcement learning, via different deep neural network architectures, to the planning problem in autonomous driving systems.
- How to incorporate multiresolution persistent homology representations into probability models.
- The quest for scene understanding in computer vision.
- Applications of harmonic analysis, topology, Riemannian geometry, and dynamical mean field theory towards developing a rigorous mathematical framework for deep neural networks.
- Cloud-based/distributed machine learning platforms.
- Large-scale nonlinear optimization.
- Developing concurrent data structures and multithreaded algorithms.
- Investigating the viability of quantum machine learning.
- A variety of more specific machine learning problems.
- Small queries into combinatorial game theory.
- Several problems in the spectral theory of self-adjoint (e.g. Schrödinger) operators.
- Several areas of computational complexity theory.
- Online failure prediction for large data centers.

I recently completed my last contract as a freelance web developer/technical consultant. Currently, I am working on a multitude of projects, helping a few friends with their startups, keeping an eye out for any potential entrepreneurial opportunities, and looking for a full-time position.

Looking for a software engineer, research, research software engineer, data engineer, or data analyst position involving one or more of the following: machine learning; distributed systems; computer vision; real-time systems; parallel computing; optimization; cloud-computing; data/numerical analysis. Particular areas that I am extremely interested in include, but are not limited to, cloud-based machine learning platforms, large-scale optimization, concurrent data structure/parallel algorithm development, real-time systems, large-scale computer vision systems, IoT analytics, and autonomous systems.

When I find the right position, I will have the ability to start full-time immediately. Feel free to contact me if you believe that I would be a good candidate for any position.

If you wish to learn more about me, my experience and my projects, that and more can be found at my personal website, clarkzinzow.me.

Willing to relocate: Anywhere

Authorized to work in the US for any employer

WORK EXPERIENCE

Web Developer/Technical Consultant

Freelance Work - Whitewater, WI - January 2016 to December 2016

- Created a persistent parallax company website using a custom Bootstrap-Material design framework. (Benefit Concepts, Inc.)
- Provided consultation on HR/payroll software systems, cloud services, and computer security. (Benefit Concepts, Inc.)
- Researched HR/payroll software for inclusion in company's offerings (in order to compete with Zenefits.) (Benefit Concepts, Inc.)
- Researched and set up viable cloud services solutions for the company. (Benefit Concepts, Inc.)
- Set up and maintained company's encrypted e-mail system via Microsoft Azure RMS. (Benefit Concepts, Inc.)

Software Engineer/Web Application Developer

100state/100health - Madison, WI - July 2014 to January 2016

- Worked on software/web app development projects focused on health IT and the state government.
- Developed complex algorithms tailored for resource-constrained computing environments.
- Learned how to use agile software development frameworks for managing product development.
- Gained valuable experience developing with JavaScript and many JavaScript frameworks.
- Created applications using modern technologies such as: AngularJS; Node.js; MEAN stack; continuous integration.
- Learned many modern software development practices from former Epic Systems software engineers.

Technical Consultant

Northwestern Mutual Life Insurance Company - Milwaukee, WI - December 2014 to May 2015

- Provided consultation on enterprise software, cloud services, and computer security for financial advisor.
- Provided general IT support.
- Compiled information packets for prospective clients and took care of document format conversions.
- Learned how to make software and cloud services compliant with strict company-defined security standards.

Web Developer

Division of Information Technology - UW-Madison - Madison, WI - June 2014 to September 2014

- Created websites, WordPress plugins and themes, and provided website maintenance for UW-Madison departments.
- Completed projects using: WAMP/MAMP stack; PHP; JavaScript; jQuery; SQL; many PHP/JavaScript frameworks.
- Learned how to complete a project efficiently via test-driven development, source control, issue tracking, and good programming practices, and how to work within a team of developers.
- Learned the proper practices for developing, testing, deploying, and managing a large web site.

EDUCATION

Bachelors of Science in Mathematics & Computer Science

University of Wisconsin - Madison, WI

2016

SKILLS

Matlab (3 years), Computer Vision (1 year), Machine Learning (2 years), C++ (3 years), C (4 years), Linear Programming (1 year), Nonlinear Programming (1 year), Java (6 years), Python (3 years), Mathematics (6 years), Optimization (1 year), LaTeX (3 years), Algorithm Design (4 years), Mathematical modeling (3 years), Applied Mathematics (2 years), Numerical Methods (3 years), HTML (7 years), HTML 5 (2 years), Javascript (5 years), Data Analysis (1 year), Linux (3 years), Web Design (5 years), Web Development (5 years), MySQL (5 years), Research (2 years), Wordpress (3 years)

LINKS

<http://clarkzinzow.me>

<https://github.com/ClarkZinzow>

<https://www.linkedin.com/in/clarkzinzow>

ADDITIONAL INFORMATION

Member of the UW Math Club, the Hub, the Undergraduate Projects Laboratory, and Badger Entrepreneurs.

Attended MHacks IV and MadHacks 2015; competed in the 2013 COMAP Mathematical Contest in Modeling (placed top 40%.)

For more information on projects, work experience, research, and much more, visit my personal website: clarkzinzow.me