Clark Zinzow

clarkzinzow.me
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EDUCATION

University of Wisconsin - Madison   *2016*
Bachelors of Science in Mathematics & Computer Science

Graduate coursework

Mathematics:	Nonlinear Optimization; Computational Mathematics II; Real Analysis; Algebraic Topology
Computer Science:	Advanced Machine Learning; Advanced Algorithms; Computer Vision; Computational Complexity

Undergraduate coursework

Mathematics:	Mathematical Logic; Topology; Abstract Algebra; Real Analysis I & II; Combinatorics; Probability Theory; Linear Algebra; Differential Equations; Discrete Mathematics
Computer Science:	Computer Networks; Algorithms; Computer Architecture; Artificial Intelligence; Compilers; Operating Systems; Cryptography; Data Structures; Machine Organization; Digital Systems

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

PROJECTS

Nonlinear Optimization Library	MATLAB library of various nonlinear optimization algorithms. (2015)
ML/Signal Processing Library	MATLAB library of machine learning/signal processing algorithms. (2016)
Computer Vision Applications	A collection of MATLAB computer vision applications. (2016)
Topological Data Analysis	Researching uses of persistent homology in probability models. (in progress)
Deep Autonomous Driving	Researching different deep reinforcement learning architectures for the planning problem in autonomous driving systems. (in progress)
Python ML Library	Python library of interesting machine learning systems/algorithms, sourced from textbooks (PRML, ESL, MLPP, UML) and research papers. (ongoing)
C++ Algorithms Library	C++ library of textbook algorithms (CLRS, K&T, DPV, TAOCP.) (ongoing)
Big Solution Manual	Compiling rigorous solutions to problems from many of the canonical mathematics and computer science graduate-level textbooks. (ongoing)
Flexy	Fitness-oriented social network, with native smartphone meet-up app. (hiatus)
MeetSnap	Contact information sharing application using proximity name broadcasting and phone-knocking information transfers via Bluetooth Low Energy. (hiatus)

For more information on these projects and many others, visit my personal website: clarkzinzow.me

EXPERIENCE

Benefit Concepts, Inc.   January 2016 - Present
Technical Consultant/Web Developer   *Whitewater, WI*

· Provided consultation on HR/payroll software systems, cloud services, and computer security.
· Set up and maintained company's encrypted e-mail system via Microsoft Azure RMS.
· Currently working on a new company website. (in progress, not deployed)

100State/100Health   July 2014 - January 2016
Software Engineer/Web Application Developer   *Madison, WI*

· Worked on software/web app development projects focused on health IT and the state government.
· Learned how to use agile software development frameworks for managing product development.
· 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.
· Developed complex algorithms tailored for resource-constrained computing environments.

Division of Information Technology at UW-Madison   June 2014 - September 2014
Web Developer   *Madison, WI*

· Created websites, WordPress plugins/themes, and provided website maintenance for UW-Madison departments.
· Completed projects using: WAMP/MAMP stack; PHP; JavaScript; jQuery; SQL; many PHP/JavaScript frameworks.
· Learned test-driven development, source control, issue tracking, and good programming practices.

TECHNICAL SKILLS

Languages: Java; C++; Python; MATLAB; JavaScript   **Technologies:** Git; Eclipse; Visual Studio; PyCharm