Clark Zinzow

🌐 clarkzinzow.me ✉ czinzow@wisc.edu 🐙 github.com/ClarkZinzow 📱 (262) 903-0034

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

Computer Vision Systems	A collection of computer vision applications. (MATLAB, 2016)
ML/Signal Processing Algs	Library of machine learning/signal processing algorithms. (MATLAB, 2016)
Nonlinear Optimization Algs	Library of various nonlinear optimization algorithms. (MATLAB, 2015)
C-- Compiler	Compiler for a subset of the C programming language. (Java, 2015)
Distributed Load Balancer	Software defined networking application implementing the same functionality as a set of hardware load balancers, via SDN switches. (Java, 2015)
Scalable Web Server	Small multithreaded, scalable web server using worker thread pools. (C, 2014)
Distributed File Server	Simple, idempotent UDP-based distributed file server. (C, 2014)
tinysh	Tiny, instructional Unix shell with a (very) verbose mode. (C, 2014)
xv6 extensions	Extensions for the xv6 operating system: CPU scheduler; modern virtual memory features; kernel threads; file system integrity mechanisms. (C, 2014)
ML Library	Library of interesting machine learning systems/algorithms, sourced from textbooks (PRML, ESL, MLPP, UML) and research papers. (Python, ongoing)
Algorithms Library	Library of textbook algorithms (CLRS, K&T, DPV, TAOCP.) (C++, ongoing)
Big Solution Manual	Compiling rigorous solutions to problems from many of the canonical mathematics and computer science graduate-level textbooks. (ongoing)

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

Experience

Benefit Concepts, Inc. January 2016 - December 2016
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.
· Created a persistent parallax company website using a custom Bootstrap-Material design hybrid css framework.

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.