

Mission Statement

My mission is to write software which *kicks ass*. I want to work with smart and creative people on projects which are worth doing right, help people in creative ways, and improve the computer's role as a cognitive tool. I am especially interested in geography, artificial intelligence, human language, cognitive science, and programming languages.

Computer Nerd

- Since my introduction to Logo and BASIC at age 10, I have relished wrapping my mind around formal language and precise instructions. My professional and scholastic experience lies mostly in Java, Perl, and C. In my quest for the right balance between fluid English and mathematical formalism I've dabbled in assembly, C++, Io, JavaScript, Lisp, Objective-C, PHP, Python, and Ruby.
- A distant descendant of *Homo habilis*, I adapt quickly to new environments and tools. I swim comfortably in Linux, MacOS X, Eclipse, SQL, HTML, CSS, XML, GATE, and GeoTools.
- From 2004 to 2009 I worked as a software engineer at Tyler Technologies, Inc. I worked at all levels of their Java-based enterprise applications. I explored and questioned requirements with analysts, built Swing-based GUIs, designed core services, refactored key data structures, debugged the persistence layer, led complex module development, crafted and documented a data conversion specification, and reviewed almost every CVS commit for errors of design and implementation. I stood out as a "go-to-guy" for insight about everything from subsystem design to text processing techniques. I created a system to extract named entities and other valuable information from OCR text. Collaborating with users, I developed the architecture and user interface to work with GIS data in our application, building upon the GeoTools library.
- At UNAVCO, Inc. in 2003 I used Perl and JavaScript to create educational Earth science map tools.
- In December, 2003 I graduated from the University of Colorado, Boulder. I received both a Bachelor of Science With Distinction and a Master of Science in Computer Science. My GPA was 3.8 on a 4.0 scale.
- I pursued advanced coursework in object oriented design, algorithms, programming languages, operating systems, network systems, cognitive science, artificial intelligence, machine learning, speech recognition, natural language processing, user interface design, network systems, and Unix system administration.
- My Senior Projects group created a graphical event-based client-server computer board game in Perl/Tk.

Eclectic Philosopher

- At CU, I minored in philosophy and was president of the Philosophy Club. I love to explore life's deep questions. I use analytic and holistic techniques to explore ethics, society, identity, and metaphysics. I presented a paper on weakness of will at the 2002 Rocky Mountain Student Philosophy Conference.
- During high school I taught a Socratic seminar course on world philosophy.
- My world view ties computer science to philosophy and psychology. I am fascinated by artificial intelligence, cognitive science, linguistics, limits of formal systems, self-organization, and societal use of computers.

Generally Diverse Individual

- My calm personality, helpful demeanor, mediation and problem solving skills, and concern for public safety led me to positions as a resident advisor and a Black Rock Ranger.
- In college, I developed leadership skills as chapter vice president of Tau Beta Pi, the national engineering honor society, and as organizer of Pagan and Green Party student groups.
- I am a friendly and unique individual. While I take projects and tasks seriously, a subtle wit and creative approach to the mundane pervade my actions, keeping a smile present among my fellows. My extensive knowledge of geographic, historic, and scientific facts entertains coworkers during casual moments.
- I love language. I play with English idioms, speak passable Spanish, and dabble in Chinese.
- I connect with the world around me through photography, camping, bicycling, and playing games.

Summary

- My mission is to write software which *kicks ass* and learn from smart, creative people
- Interests include geography, artificial intelligence, human and programming languages, and cognition
- Bachelor's and Master's Degrees in computer science, minor in philosophy
- Experienced with Java, Perl, C, SQL, WWW, Swing, Linux, MacOS X, text processing
- Familiar with assembly, C++, Cocoa, Io, JavaScript, Lisp, PHP, Python, Ruby

Experience

Tyler Technologies, Inc.

Lakewood, CO

Software Engineer

Feb, 2004 – Apr, 2009

- EagleSoftware: Java-based enterprise application for county government offices
- Designed, implemented, debugged, and refactored code at all levels:
 - Swing framework, client views, business logic, core services, persistence layer, data conversion
- Implemented information extraction from OCR text to save data entry time
- Lead developer for GIS architecture and UI, built on GeoTools API
- Worked directly with key clients on requirements gathering and project implementation
- “Go-to-guy” for complicated problems, design/code reviews, theoretical wisdom

UNAVCO, Inc.

Boulder, CO

Contractor

May, 2003 – Jan, 2004

- Implemented Voyager Jr. and other Earth science web map tools
- Perl/CGI server, HTML/CSS/JavaScript client

University of Colorado

Boulder, CO

Senior Software Engineering Project

Sep, 2001 – May, 2002

- Worked in 5-person team to design and implement computer game
- Client-server architecture with graphical interface, written in Perl/Tk

Education

University of Colorado

Boulder, CO

Master of Science – Computer Science

Aug, 2001 – Dec, 2003

Bachelor of Science With Distinction – Computer Science

Aug, 1998 – Dec, 2003

- GPA 3.8 out of 4.0
- Minor in Philosophy
- Advanced coursework included

Machine Learning	Cognitive Science	Algorithms
Speech Recognition	User Interface Design	Network Systems
Artificial Intelligence	Object Oriented Design	Operating Systems
Natural Language Processing	Programming Languages	Unix System Administration

Activities and Hobbies

- Resident Advisor, University of Colorado Department of Housing, 2001-2003
- Vice President, Tau Beta Pi engineering honor society, Colorado Beta chapter, 2002-2003
- President, Philosophy Club, 2000-2001
- Black Rock Ranger, Burning Man, 2009-
- English master, intermediate Spanish speaker, Chinese novice, amateur linguist
- Digital photographer, game player, world traveler, wearer of many hats