



Michael Oltmans

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OBJECTIVE

I am seeking a job as a computer programmer. My career thus far has been focused on research and academia. However, I have a strong interest in working on projects with real-world applications and I am currently looking for a position as part of a software design team in an industrial setting. I have extensive programming experience and take pride in designing general and reusable code. I enjoy the process of software engineering, and the challenges involved, regardless of the specific task.

EDUCATION

Massachusetts Institute of Technology, Cambridge MA

1998-present

Doctor of Philosophy in Computer Science - Degree expected June 2007

- Computer Science and Artificial Intelligence Laboratory (CSAIL)
- Specialties include sketch recognition, multimodal interaction, computer vision, and machine learning

Master of Science in Computer Science, August 2000

- Artificial Intelligence Laboratory (now CSAIL)
- Thesis: "Understanding Naturally Conveyed Explanations of Device Behavior" As part of my thesis I designed and wrote a system to understand mechanical devices from multimodal descriptions conveyed through sketches and verbal explanations.

Northwestern University, Evanston IL

1994-98

Bachelor of Science in Computer Science, June 1998

- Graduated with honors
- Concentration in mathematics

SKILLS AND INTERESTS

Programming

- Java (Primary expertise). Ten years experience including familiarity with Eclipse, Ant, Swing, unit tests, and numerous other Java APIs.
- C/C++, Lisp, Scheme, Python, Perl, Matlab
- Basic usage of ArcGIS geographic processing software, including the Python API
- CVS usage and basic administration
- Linux administration (Debian)
- Sound fundamentals in object-oriented and functional programming, which allow me to easily learn new programming languages

Other

- Language abilities include Conversational French.
- Interests include four-season hiking, backpacking, soccer and numerous informal sports leagues
- I am generally involved with our rich lab culture. I have organized numerous lab social events, soccer, hockey, water-polo (regular and inner tube), foosball, and unihoc teams at various points.

WORK EXPERIENCE:

MIT, Cambridge MA

September 1998-Present

Doctoral Candidate

- In addition to standard research tasks I managed two server class GNU Linux machines which run a database, web server, Wiki, CVS repository and other software.
- Worked closely with 4-5 other students to develop a coherent code base for sketch recognition research.
- Worked on development of ASSIST, a sketch based interface to a 2D kinematics simulator.
- Thesis adviser Dr. Randall Davis.

MIT, Cambridge MA

September 2001-September 2002

Research Programmer

- Built API's, infrastructure code, and GUI's to enable researchers to focus on improving their algorithms, rather than on programming and software maintenance.
- Primary project was a truth-maintenance based blackboard system.
- Work supervised by Dr. Randall Davis.

Nokia, Burlington MA

June-August 2001

Research Programmer

- Designed and implemented a prototype for an intelligent museum exhibit using Intelligent Room software from the MIT Artificial Intelligence Lab to demonstrate the possibilities of portable, ubiquitous, and multimodal user interfaces and their applicability to Nokia's vision and products.

Northwestern University, Evanston IL

June 1996-July 1998

Research Programmer

- Researched and implemented self-explanatory simulators using techniques from AI including constraint propagation and truth-maintenance systems.
- Designed and built a student-friendly GUI.
- Translated code from Lisp to Java and worked on Lisp code designed to automatically generate Java code.
- Work supervised by Dr. Kenneth D. Forbus.

Federal Express, Memphis TN

June 1996-August 1996

Computer Programmer

- Wrote C programs with embedded SQL to update and extract information from a database.
- Co-authored a comprehensive data-definition document for internal distribution.

Northwestern University, Evanston IL

November 1995-June 1996

Research Programmer

- Researched and implemented algorithms in graph theory research for the GeoMAMO-Geometric Object Manipulation/Monitoring System Project.
- Work supervised by Dr. Der Tsai Lee.

MECC, Minneapolis MN

August 1994-September 1994

Computer Program Beta Tester

August 1995-September 1995

- Responsible for identifying problems with content, functionality, and appearance of educational software.
- Products worked on included Africa Trail and Museum Madness.
- Contributed to meetings with project leaders, managers, and programmers.