## John Chilton

CONTACT Information

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RESEARCH INTERESTS

Computer Science Education and Techniques for Engaging Students in Programming Courses, Robotics Education, Functional Programming Languages, Machine Learning and its Applications to Bioinformatics

**EDUCATION** 

University of Minnesota, Minnesota USA

Department of Computer Science and Engineering

 $M.S.,\ Computer\ Science,\ 2005\mbox{-}2007$ 

• Grade Point Average: 4.00 out of 4.00

B.S., Computer Science, 2001-2005

- Graduated with High Distinction
- Minors in Mathematics and Statistics
- Grade Point Average: 3.99 out of 4.00

EXPERIENCE

# University of Minnesota, Minnesota USA

Software Developer

Summer 2007 - Present

Involved in every stage of the software life cycle for a successful collaborative project between the Minnesota Supercomputer Institute (MSI) and the Mayo Clinic. As part of this project, I built a Web Services infrastructure enabling collaboration between researchers at the two institutions and developed many supporting components including a file and metadata store, analytical services, a workflow engine, and an AJAX web frontend. Additionally, I completed a project to enable secure job submissions to Windows clusters via ASP.NET Web Services implemented in C#.

Teaching Assistant

Fall 2003 - Summer 2007

Duties at various times included grading, holding office hours, assignment design, and leading discussions and lecturing in both computer lab and classroom setings for groups of students ranging in size from 3 to 120.

Research Assistant - Robotics

Fall 2005 - Fall 2006

Worked on various projects as a member of the University of Minnesota Multiple Autonomous Robotic Systems laboratory. Including work as part of a grant from NASA to develop a C++ application for mobile robot localization and mapping.

 $Research\ Assistant\ -\ College\ Education$ 

Spring 2005 - Spring 2007

Investigated methods of promoting student learning in large college classes.

Bioinformatics Institute Summer Intern

Summer 2004

Developed an easy to use program to preform statistical analysis of gene expression microarray data.

Honors and Awards Scolarships and Fellowships

Various

Wallin Scholarship, Lando Scholarship, University of Minnesota Department of Computer Science and Engineering Academic Excellence Fellowship

Institute of Technology Teaching Assistant of the Year Award

Spring 2005

Awarded to the top three University of Minnesota Institute of Technology (IT) teaching assistants as voted on by IT students.

## Papers and Presentations

Maria Gini, John Chilton, and Murray Jensen. Creating Cooperative Competition: Learning Games for the Classroom. Academy of Distinguished Teachers Conference. Minneapolis, MN, USA. April 2007.

John Chilton and Maria Gini. Using the AIBOs in a CS1 Course. AAAI Spring Symmposium - Robots and Robot Venues: Resources for AI Education. Palo Alto, CA, USA. March, 2007.

John Chilton and Maria Gini. Learning Games: Creating Cooperative Competition. The Collaboration for the Advancement of College Teaching and Learning. Bloomington, MN, USA. November, 2006.

### SERVICE

Reviewer for:

IEEE International Conference on Robotics and Automation (ICRA), 2006 Robotics: Science and Systems (RSS), 2006

### ACTIVITIES

University of Minnesota ACM Programming Team

2002-2005

### Computer Skills

- Java Experience: Hibernate, Java Persistence API (JPA), Spring, GWT, Ant, TestNG, JUnit, EasyMock, Android, JAXB, Axis, Globus, caGrid
- Programming Languages: Java, SQL, C, C++, Scheme, Matlab, Groovy, Haskell, PHP, Python, Scala, JavaScript, MPI, R, HTML, CSS, LATEX
- Certifications: Sun Certified Java Programmer