

COLIN WOODARD BARRINGER

colinb@cs.umass.edu

University of Massachusetts
Amherst, MA 01003

Tel (Mobile): (413) 374-4626

Tel (Home): (413) 548-9580

Objective

Research position on projects related to motor control, machine learning or computational neuroscience.

Education

- **University of Massachusetts**—Amherst, MA (**September 2005**)
M.S. in Computer Science
- **University of Massachusetts**—Amherst, MA (**May 2003, Magna Cum Laude**)
B.S. in Computer Science and B.A. in Japanese Language & Literature
 - **Projects:**
 - * Honors Project: “JMDicted: A Japanese ↔ Multilingual Electronic Dictionary for Macintosh OS X” with Profs. James Allan and Stephen Forrest
 - * Independent Study: “Resolution of Conflicting Behaviors in the Potential Field Approach to Motion Planning” with Prof. Oliver Brock
 - * Independent Study: “Simulated Jigsaw-Solving A4 Robot” with Profs. Roderic Grupen and Paul Utgoff
- **International Christian University**—Tokyo, Japan (**September 2000 - May 2001**)
One Year Regular

Research Interests

My primary research interest is to pursue a computational understanding of the human motor control system and to explore the applications of such an understanding to robotics and rehabilitation. This includes the study of computational neuroscience, mathematical modeling of motor control, machine learning and brain machine interfaces.

Positions

- **Autonomous Learning Lab**—Department of Computer Science, UMass
Research Assistant: January 2004 - Present
 - Advisor: Andrew G. Barto
 - Project: Modeling and analysis of movement units in reaching tasks.

- **Machine Learning Lab**—Department of Computer Science, UMass
Research Assistant: September 2003 - December 2003
 - Advisor: Paul Utgoff
 - Project: Automatic detection of rhythm and key in classical music.
- **Laboratory for Advanced Software Engineering**—Department of Computer Science, UMass
Undergraduate Research Assistant: September 2001 - September 2002
 - Advisor: Lori Clarke
 - Project: Design and implementation of a Java finite state machine library.
- **Princeton Summer Institute**—Department of Computer Science, Princeton University
Research Assistant: June 2000 - August 2000
 - Advisor: David August
 - Project: IA64 processor optimization and simulation.
- **Department of Mathematics and Statistics**—UMass
Undergraduate Teaching Assistant: January 1999 - May 2000
 - Duties: Grading homework and hosting help sessions for students of Calculus I and II.

References

- Prof. Andrew G. Barto, Department of Computer Science, UMass.
- Prof. Oliver Brock, Department of Computer Science, UMass.
- Prof. Roderic A. Grupen, Department of Computer Science, UMass.

Special Skills

- Advanced Low Certification on the American Council on the Teaching of Foreign Languages Oral Proficiency Interview for Japanese
- Experienced web designer familiar with several current technologies including: XHTML, PHP and CSS