Michael Brooks

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Education

PhD Student, Human Centered Design and Engineering (HCDE)   2010-Present
    University of Washington

B.A. with High Honors, Computer Science, Mathematics   2006-2010
    Oberlin College

Awards and Honors

Oberlin College NSF S-STEM Scholarship for Computational Modeling   2009-2010
National Merit Scholar   2006-2010

Research Experience

Research Assistant   2011-Present
Cecilia Aragon, HCDE, University of Washington
Led the user-centered design, development, and evaluation of a new biometric authentication
technique based on eye movement data.

Research Assistant   2010-2011
Julie Kientz, HCDE, University of Washington
Designed and developed an interactive online baby diary as part of research on how technology could
help parents track their children's developmental progress.

Undergraduate Thesis Project   2009-2010
Richard Salter, Computer Science, Oberlin College
Designed and tested prototypes of real-time visualization software as a practice tool for musicians.
Conducted interviews with musicians to assess the prototypes.

Research Experience for Undergraduates   Summer 2008
    Carleton College
    Applied game theory to create, analyze, and simulate theoretical models of the formation of realistic
    social networks.

Teaching Experience

Instructor   2009
    Oberlin College
    Taught for-credit Experimental College course in Competitive Computer Programming, helping to
    prepare teams of students for programming competitions by teaching a combination of CS
    fundamentals, programming technique, and competition strategy.

Teaching Assistant   2007-2009
    Computer Science, Oberlin College
    Graded and helped with labs for the introductory CS course. Graded and developed curricular
    materials for a new course Game Design.

Tutor   2008-2009
    Computer Science and Mathematics, Oberlin College
    Tutored students in Intro. Computer Science, Data Structures, Programming Abstractions, Theory of
    Computer Science, and Differential Equations.

Work Experience

Software Development Intern   Summer 2010
    RE2 Inc.
    Developed the API, system software, and demo software for DARPA's Autonomous Robotic
    Manipulation robot.

Software Development Intern   Summer 2009
    RE2 Inc.
    Maintained and developed RE2's Joint Architecture for Unmanned Systems Software Development
    Kit.

Engineering/Design Intern   Summer 2007
    Tackle Design Inc.
    Worked with team of engineers, designers, and NGO representatives to research and develop a sturdy,
    power-efficient, and inexpensive infant incubator optimized for developing countries.

Online Editor   2008-2009
    The Oberlin Review
    Transferred weekly news articles to the *Review*'s website. Developed new website features and
    developed plans for a major website redesign.

Development Skills

General: Java and Swing, C# and WPF, C++, Python
Web: PHP, HTML, CSS, JavaScript, SQL, AJAX
Tools: Subversion, Mercurial, Visual Studio, Netbeans, LaTeX, Windows and Linux systems

Service

Student Volunteer, CHI 2011 Conference   Spring 2011