Katherine Panciera

Contact Information

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Education

University of Minnesota, Twin Cities, Minneapolis, MN
- Ph.D., Computer Science — **Expected 2010**
- M.S., Computer Science — **Expected 2008**
  - Advisor: Loren Terveen
  - GPA: 3.51/4.00

Berea College, Berea, KY
- B.A. Computer Science — **May 2005**
- B.A. Mathematics — **May 2005**
  - *Magna cum Laude*
  - GPA: 3.79/4.00

University of York, York, United Kingdom
- Study Abroad — **January 2004 to June 2004**
  - Computer Science and Mathematics Coursework

Coursework Projects

Active Prevention — **Fall 2007**
e-Public Health: Online Public Health Interventions
I served as the sole technical developer and the primary designer on a five person team that created a website to help women who have had gestational diabetes reduce their risk for type two diabetes

Wikipedians Over Time — **Fall 2006**
Creating the Social Web Seminar
I worked on the design, analysis, and paper for a three person project in which we compared Wikipedia user contribution patterns from 2002 and 2005 to see how Wikipedia changed when the user base grew dramatically

A Study of a Visual Programming Environment for LEGO Mindstorms Robots — **Spring 2006**
Human Computer Interaction and User Interface Technology Seminar
I designed and executed a small scale usability test to evaluate the Lego Mindstorms RCX programming interface which culminated in a paper and class presentation

medwIRC — **Fall 2005**
User Interface Design, Evaluation, and Implementation
I worked on design, requirements gathering, and analysis as part of a five person project to design a back channel chat interface for a local hospital's weekly emergency room conference

Teaching Experience

Invited Lectures

Gustavus Adolphus College — **May 9, 2007**
St. Peter, MN
Adventures in Human-Computer Interaction

Berea College — **March 12, 2007**
Berea, KY
Where can you go from here? Tales from a Berea CS Graduate

University of Minnesota, Twin Cities
Department of Computer Science and Engineering
Minneapolis, MN
Teaching Assistant — **Fall 2005, Fall 2006 to Spring 2007**
I assisted with three different courses, ranging from freshman Computer Science to graduate User Interface Design. I graded homework, wrote exams and assignments, led labs, ran project meetings, and assisted students as needed.

Berea College
Department of Mathematics and Computer Science
Berea, KY
Teaching Assistant — **Fall 2003 to Spring 2005**
I worked in the Math and CS Department, assisting with four different courses. I graded homework, helped students, and occasionally led lectures. I also worked in the Math Lab, tutoring for all Math and CS courses.

Research Experience

Center for Distributed Robotics
University of Minnesota, Twin Cities
Minneapolis, MN
Human-Robot Interaction — **August 2005, Jan 2006 to May 2006**
Advisor: Nikos Papanikolopoulos
I worked on multiple projects, including researching interfaces for optimal control of robots and the eROSI educational platform.

Social Robotics Lab
Yale University
New Haven, CT
Humanoid-Human Interaction — **Aug 2003 to May 2005**
Advisor: Brian Scassellati
I spent time working with various members of the lab and learning more about their projects. I also worked on a small project to bring back to the University of Minnesota.

Department of Mathematics and Computer Science
Berea College
Berea, KY
Dispersion of Robotic Teams — **May 2003 to Aug 2003**
Advisors: James Blackburn-Lynch and Jan Pearce
I used Lego Mindstorms RCX Units to study the efficacy of various methods of dispersion

Posters

K. Panciera, M. Cardosa, and A. Rouben. *Wikipedians Over Time: A Comparative Study of User Contributions*, Grace Hopper Celebration of Women in Computing, October 2007

Publications & Professional Contributions

K. Cannon, **K. Panciera**, and N. Papanikolopoulos. *Second Annual Robotics Summer Camp for Underrepresented Students.* Proceedings of the 2007 Conference on Innovation and Technology in Computer Science Education.

K. Cannon, M. LaPoint, N. Bird, **K. Panciera**, H. Veeraraghavan, N. Papanikolopoulos, and M. Gini. *Summer Educational Opportunities for Underrepresented Groups Using Robots.* IEEE Robotics and Automation Magazine. June 2007.

R. Priedhorsky, J. Chen, S. Lam, **K. Panciera**, L. Terveen, and J. Riedl. *Creating, Destroying, and Restoring Value in Wikipedia.* Proceedings of GROUP 2007.

Presentations

K. Panciera *Second Annual Robotics Summer Camp for Underrepresented Students*, Conference on Innovation and Technology in Computer Science Education, Dundee, Scotland, June 2007

K. Panciera *Technology Outside the Bubble*, Pi Mu Epsilon Student Conference, Miami University (Oxford, OH), October 2005

E. Hess and **K. Panciera**. *Comparing Dispersion Algorithms for Teams of Robots*, Invited presentation to Berea College Trustees, Berea College (Berea, KY), October 2004

W. Centers, E. Hess, **K. Panciera**, J. Blackburn-Lynch, and J. Pearce. *Research with Intrinsic Interest*, Teaching and Learning Faculty Seminar, Berea College (Berea, KY), October 2003

W. Centers, E. Hess, **K. Panciera**, and J. Pearce. *Robotic Dispersion using LEGO Mindstorms*, Upward Bound High School Summer Camp, Berea College (Berea, KY), July 2003

Professional Experience

Girls In Science
University of Kentucky
Lexington, KY
Camp Counselor **June 2005**

I supervised and mentored twenty eighth grade girls along with two other counselors for three one-week overnight sessions to encourage them to consider science, math, and technology careers.

Letcher County Circuit Court
Whitesburg, KY
Government Database Intern **July 2004 to Aug 2004**

I worked on database design and the creation of software training materials for county employees.

Department of Music
Berea College
Assistant to the Chair **Aug 2001 to May 2003**

I managed a $9000 scholarship fund that supported student trips to concerts around Kentucky, Ohio, and Tennessee. I also was a primary editor of the departmental self-study and assisted with various operations for the Concert Choir Summer Europe Tour.

Honors

National Science Foundation

Graduate Research Fellowship — **2006 to present**

Department of Computer Science and Engineering
University of Minnesota

Departmental Academic Excellence Fellowship — **Spring 2006**

A departmental award for first year Ph.D. students to allow them to focus on research.

Berea College

Olive Ruth Russell Fellowship — **2005 to 2006**

A scholarship for women at Berea College to pursue graduate or professional study.

Ballard-McConnell-Willis Mathematics Scholarship, — **Aug 2003 to May 2005**

A scholarship for math students at Berea College, given for scholarship, moral character, and sharing an appreciation for mathematics. Award is for travel, books, and other scholarly endeavors.

Berea Term Abroad Scholarship — **Spring 2004**

Awarded to academically successful students to fund half of an all-inclusive study abroad semester

Math and Computer Science Department Labor Award — **Spring 2004**

Music Department Labor Award — **Spring 2002**

Awarded to the top student workers annually

Honor Societies

Pi Mu Epsilon — **inducted Spring 2004**

Phi Kappa Phi — **inducted Fall 2002**

Committee Work & Institutional Service

Department of Computer Science and Engineering
University of Minnesota

Computer Science Graduate Association — **2005-present**

2006-2007 Secretary
2007-2008 President

Director of Graduate Studies Advisory Council — **2007-present**

Ph.D. Student Evaluation Process Committee — **2007-present**

Graduate Student Recruiting — **2007-present**

Berea College

Math and Computer Science Club — **2001-2005**

2003-2004 Secretary/Treasurer
2004-2005 President

Concert Choir — **2002-2005**

2002-2004 Secretary/Treasurer

Department of Math and Computer Science
Faculty Recruiting Committee — **2005**

American Choral Directors Association Chapter — **2005**

2005 President

Campus Activities Board — **2002-2004**

Provost's Advisory Board — **2001-2002**

University of York

University of York Glee Singers — **2004**

Professional Memberships

Memberships

Association for Computing Machinery (ACM)	**2003 to present**
ACM Special Interest Group on Computer-Human Interaction	**2004 to present**
ACM Special Interest Group on Accessibility	**2005 to present**
American Choral Directors Association	**2005 to present**
IEEE Robotics and Automation Society	**2005 to 2007**
ACM Special Interest Group on Computer Science Education	**2006 to present**
Computer Science Teachers Association	**2006 to present**

Community Work & Public Service

University of Minnesota Technology Day Camp Month of August 2005-2007
Minneapolis, MN

In 2005, I served as a graduate student assistant during the week long robotics and technology camp. In 2006, I helped lead the camp as the primary assistant to the organizer. In 2007, I was one of the two organizers and led a group of students for the week. In addition, I was involved in scheduling, curriculum design, and other planning. The camp was designed to entice Latino, African-American, and female middle schoolers to pursue further studies in Computer Science.

Plymouth Congregational Church Choir **April 2006 to present**
Minneapolis, MN

I participate on a weekly basis in rehearsals and services, singing two-three pieces every Sunday. The choir is auditioned and is directed by Philip Brunelle.

Whittier International Elementary School Math Tutor Jan 2007 to present
Minneapolis, MN

Currently I spend an hour a week working with a first-grade girl on concepts from patterns to money to basic arithmetic. We work in English and (rudimentary) Spanish.

Conference Reviewer

2008 International World Wide Web Conference (WWW)
2008 Technical Symposium on Computer Science Education (SIGCSE)
2007 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)
2007 Conference on Innovation & Technology in Computer Science Education (ITiCSE)
2006 IEEE International Conference on Robotics and Automation (ICRA)

References

Available on Request