

Dr. Katie Panciera

Educator & Researcher

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Education

Ph.D., Computer Science

September 2014

M.S., Computer Science

January 2012

University of Minnesota, Twin Cities, Minneapolis, MN

Advisor: Dr. Loren Terveen

B.A., Independent Major: Computer Science, magna cum laude

May 2005

B.A., Mathematics, magna cum laude

May 2005

Berea College, Berea, KY

Advisor: Dr. Jan Pearce

Semester Abroad: University of York, United Kingdom

Teaching Experience

Assistant Professor

Fall 2019 to present

Humanities, Social Science, and Communication Department

Milwaukee School of Engineering

- Fall 2024 I will be on protracted leave, teaching a reduced course load to focus on my computer science education research.
- I teach three or four courses per term with a total of 50-120 students across all courses in a given term.
- Prior to Fall 2023, we were on a quarter system and I taught three 11 week terms a year. We then switched to semesters and now teach two 16 week terms a year. In addition, I was also responsible for converting five of my quarter classes to semesters as well as developing three new classes.
- My current courses include: UXD 2010 Inclusive Design, UXD 2040 People + Automation, UXD 3010 UX Research, UXD 3030 Data Visualization, and UXD 4030 UX Strategy.
- I developed UX Strategy, People + Automation, UX Research II, Data Visualization, Design Thinking, Cybercrime: Human Perspectives, and UX Senior Design from scratch.
- In the spring of 2020 when we moved to online teaching, I quickly adapted Creative Thinking and Foundations of User Experience for the online classroom. My format for the latter is still in use in the classroom.
- I am an advisor to approximately 15 UX majors and have supervised students in nine internships and seven practicums.
- I am a faculty representative on the UX Industrial Advisory Committee.
- I am on the EECS First Year Programming Committee and run the Lived Experience subcommittee.
- I am a representative on the Explorers Pathway Committee and the associated Computing Pathways subcommittee and General Engineering Course subcommittee.

Teaching Experience (continued)

Instructor

Spring 2010

Department of Computer Science and Engineering

University of Minnesota

- With Dr. Phillip Barry, I co-taught CSCI 1001: Overview of Computer Science, a class with 50 students. This class was an introductory class for non-computer science majors and met both a math requirement and a citizenship and public ethics requirement for undergraduates. There were three lectures and one lab session a week.
- I was responsible for approximately half of the lectures, as well as writing the associated assignments, labs, and exams. In addition, I helped to oversee the three teaching assistants for the course.

Teaching Assistant

Fall 2005

Department of Computer Science and Engineering

Fall 2006 to Spring 2007

University of Minnesota

Fall 2011 to Spring 2012

Professors: Dr. Loren Terveen and Dr. Joseph Konstan

- I assisted with four different courses: Structure of Computer Programming (CSCI 1902, a CS II course), UI Design, Implementation and Evaluation (CSCI 5115, a graduate level HCI course), Overview of Computer Science (CSCI 1001, an intro to computer science for non-majors), and User Interface Design and Evaluation (SENG 5115, a HCI course for the professional software engineering masters program).
- I graded homework, wrote exams and assignments, led labs, ran project meetings, and assisted students as needed.

Teaching Assistant

Fall 2002 to Spring 2005

Department of Mathematics and Computer Science

Berea College

Supervisor: Dr. Jan Pearce

- I assisted with four different courses: Introduction to Computer Science, Algorithms, Objects, and Data Structures, Calculus II, and Environmental Issues: A Math Modeling Approach.
- I graded homework, helped students, and occasionally led lectures. I also worked in the Math Lab, a tutoring center for all math and computer science courses.

UX Experience

Senior User Experience Researcher

Dec. 2016 to June 2019

User Experience Researcher

July 2014 to Dec. 2016

Google, Inc.

Mountain View, CA

Manager: Dr. Gill Ward

- I led user experience research for products relating to admin and end user onboarding to G Suite. My goal was to ensure that our research resources were allocated appropriately and that we are providing insights to the relevant product teams to help guide decisions and future direction.
- From Sept. 2018 to June 2019 I supported G Suite Data Migration tools. I supported multiple G Suite security tools including G Suite Dashboards, Security Health, Investigation Tool, and Data Loss Prevention from Sept. 2017 to August 2018. Prior to that I was embedded on the Payments Design team, working on a variety of products from July 2014 to August 2017.

UX Experience (continued)

- I utilized my extensive qualitative experience with remote and in-person moderated interviews, usability testing, field research, and survey design and analysis to support the entire product lifecycle from formative interviews through product launches. I worked with designers, content strategists, product managers, engineers, program managers, sales, and marketing.
- I led or planned four international research trips to 10 different countries. This involved vendor selection, vendor management, and team leadership as well as the standard research preparations. In addition this work involved ethnographic research.
- I served as an interviewer on panels for hiring both researchers and designers. In less than 3.5 years I interviewed 94 candidates and submitted feedback for each within an average of 1.5 hours.
- I received 13 peer bonuses from colleagues and 10 spot bonuses from my manager and/or leadership recognizing me for going above and beyond.

User Experience Researcher

Feb. 2013 to March 2014

Facebook, Inc.

Menlo Park, CA

Manager: Dr. Judd Antin

- I designed and analyzed both quantitative and qualitative surveys, facilitated interviews and usability testing, monitored product launches, and suggested product changes.
- I supported News Feed, Videos, and Follow at various phases from formative interviews through post-launch monitoring.
- I primarily worked with SQL, R, Excel, Qualtrics, and internal tools. I completed engineering bootcamp as well as datacamp.

GroupLens Research: Cyclopath & Wikipedia

April 2007 to Jan. 2013

University of Minnesota

Advisor: Dr. Loren Terveen

- Cyclopath was a research geowiki focusing on the bicycling community in the Minneapolis-St. Paul metro area. We had over 2,500 registered users, and the map was revised over 12,000 times.
- I created and analyzed a survey of over 400 Cyclopath users, developed data-driven personas for Cyclopath, and conducted interviews with Cyclopath users to learn more about cycling habits, Cyclopath usage, and Cyclopath usability.
- I also used Cyclopath log data to answer research questions and discover user trends.
- I investigated lifecycles of Wikipedia editors, focusing on differences between elite and average editors.
- My Wikipedia work was primarily quantitative in nature and involved working with the Wikipedia log data to discover patterns and answer questions we had posed.

UX Experience (continued)

User Experience Research Intern

Summer 2008

Google, Inc.

Mountain View, CA

Mentor: David Choi

- I worked on the ads team on two projects, one formative and the other a user-centered design project.
- I developed data-driven personas and planned, ran, and analyzed usability studies. During usability testing we utilized the RITE method.
- In addition to running my own remote-usability studies, I ran studies for another researcher on short notice. I also worked with a remote researcher to run a joint study.

Research Experience

Research Assistant

August 2005, Jan. 2006 to May 2006

Center for Distributed Robotics

University of Minnesota

Advisor: Dr. Nikolaos Papanikolopoulos

- I worked on the development and maintenance of a technology summer camp for middle school children.
- I researched interfaces for optimal control of robots, specifically the eROSI educational platform.

Visiting Researcher

July 2006 to August 2006

Social Robotics Research Lab

Yale University

Supervisor: Dr. Brian Scassellati

- As part of my initial research for my NSF Graduate Research Fellowship, I visited the Social Robotics Research Lab to learn more about humanoid research and autism research.
- I worked with their primary robot, Nico, and set up an eye tracking project to bring back to the University of Minnesota.

Research Assistant

Summer 2003

Department of Mathematics and Computer Science

Berea College

Advisors: Dr. James Blackburn-Lynch and Dr. Jan Pearce

- I worked with a team of two other students and two faculty to study the efficacy of various methods of robot dispersion.
- This project involved programming, but also engineering. We used the Lego Mindstorms and several add ons had to be created in order to facilitate different types of dispersion.

Publications (Peer Reviewed)

K. Panciera, M. Masli, and L. Terveen. Crème de la crème: Elite contributors in an online community. Proceedings of OpenSym 2014.
Acceptance rate: 45%

K. Krauskopf, J. Bertram, Y. P. Hsiao, S. Huber, **K. Panciera**, N. Sträfling, A. Wichmann, and J. van Aalst. “Memetic Processes as Conceptual Framework for Idea Improvement in Knowledge Building”. Proceedings of ICLS 2012.

K. Panciera, M. Masli, and L. Terveen. ““How should I go from __ to __ without getting killed?”: Motivation and Benefits in Open Collaboration”. Proceedings of WikiSym 2011.
Acceptance rate: 42%

K. Panciera, R. Priedhorsky, T. Erickson, and L. Terveen. “Lurking? Cyclopaths? A Quantitative Lifecycle Analysis of User Behavior in a Geowiki”. Proceedings of CHI 2010. **Honorable Mention, Best Paper. (Top 5% of submissions.)**
Acceptance rate: 22%

K. Panciera, A. Halfaker, and L. Terveen. “Wikipedians are Born, Not Made: A Study of Power Editors in Wikipedia”. Proceedings of GROUP 2009.
Acceptance rate: 36%

R. Priedhorsky, J. Chen, S. Lam, **K. Panciera**, L. Terveen, and J. Riedl. “Creating, Destroying, and Restoring Value in Wikipedia”. Proceedings of GROUP 2007.
Acceptance rate: 29%

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.
Acceptance rate: 30%

K. Cannon, M. LaPoint, N. Bird, **K. Panciera**, H. Veeraraghavan, N. Papanikolopoulos, and M. Gini. “Using Robots to Raise Interest in Technology Among Underrepresented Groups”. IEEE Robotics and Automation Magazine. June 2007.

Honors & Awards

National Science Foundation
Graduate Research Fellowship **2006 to 2009**

Kern Family Foundation
Nominated for a Keen Fellowship **2021**

Milwaukee School of Engineering
Nominated for the Diversity & Inclusion Staff & Faculty Advocate Award **2021, 2023**

Department of Computer Science and Engineering
University of Minnesota
Graduate Assistance in Areas of National Need Fellowship **2009 to 2011**
Departmental Academic Excellence Fellowship **Spring 2006**

**Honors &
Awards
(Continued)**

Berea College

Olive Ruth Russell Fellowship

2005 to 2006

A competitive scholarship for Berea College women to pursue graduate study.

Ballard-McConnell-Willis Mathematics Scholarship

2003 to 2005

A competitive scholarship for math students at Berea College.

**Invited Talks &
Panels**

Berea College, Berea, KY

November 16, 2023

Tech Ethics Roundtable

Disenfranchised by Data: The Hidden Cost of Data Breaches for Marginalized Groups

ACM-W Celebrating Technology Leaders, Online
Mental Health, Wellbeing, and Self-Care

March 16, 2022

Berea College, Berea, KY

March 12, 2021

Human Computer Interaction Guest Speaker

UX in Industry

Berea College, Berea, KY

March 10, 2021

Computer Science Alumni Spotlight

Q & A

Louisiana Tech University, Ruston, LA

September 2020

Usability and User Experience Design class guest speaker

Interview

Berea College, Berea, KY

Nov. 13, 2015

Computer Science Homecoming Lecture

Introduction to User Experience

Royal Society, London, UK

April 10, 2015

Digital Change Symposium

Panelist: Alternative digital futures for money and exchange

Syracuse University, Syracuse, NY

Nov. 2, 2011

iSchool Brown Bag Talk

User Participation in Open Collaboration: When, Why, and Who Cares?

Berea College, Berea, KY

Nov. 12, 2010

Computer Science Homecoming Lecture

The Early Lives of Users in Online Communities

Georgia Tech, Atlanta, GA

Sept. 30, 2010

Electronic Communities Learning Research Group

In the Beginning: The Early Lives of Users in Online Communities

Workshops (Leader)

A. Forte, S. P. Goggins, S. Sawyer, D. Rotman, M. Twidale, C. Sims, K. Shankar, B. Butler, **K. Panciera**, and H. Mentis. Socio-Technical Research: Connecting Disciplines in the iSchools. iConference, February 2011.

S. P. Goggins, A. Forte, S. Sawyer, D. Rotman, M. Twidale, C. Sims, K. Shankar, B. Butler, **K. Panciera**, and H. Mentis. Sharing the Socio-Technical Workshop Results: An Alternative Event with Alternate Endings. iConference, February 2011.

C. Aragon, M. Gini, and **K. Panciera**. How Do I Become a Researcher? Grace Hopper Celebration CRA-W Career Mentoring Workshop, September 2010.

Workshops (Participant)

CRA-WP Early and Mid Career Mentoring Workshop.
Chicago, IL. November 2023.

CRA Level Up Workshop.
Rosemount, IL. October 2023.

The Art and Science of Story.
Chattahoochee Hills, GA. August 2023.

MSOE Embrace Diversity Training.
Online. July 2021.

Not Just Bar Charts: Making Better Graphs.
Online. July 2021.

Storymakers Workshop through the Kern Entrepreneurial Engineering Network.
Online. June 2021.

Leadership Unleashed through the Kern Entrepreneurial Engineering Network.
Online. June 2020.

Collaboration and Social Computing in Emerging Financial Services at CSCW 2015.
Vancouver, BC. March 2015.

Summer Social Webshop at the University of Maryland.
College Park, MD. August 2012.

SAVI Planning Workshop: Towards a Virtual Institute for the Measurement, Evaluation and Management of Open Online Communities.
Syracuse, NY. July 2012

Doctoral Consortium at WikiSym 2011.
Palo Alto, CA. October 2011.

Making Sense of Social Media: Empirical Research and Future Directions.
Swabian Alb, Germany. August 2011.

Workshops (Participant) (Continued)

Human Computer Interaction Consortium (HCIC) 2011.
Pacific Grove, CA. June 2011.

Summer Research Institute, Consortium for the Science of Sociotechnical Systems
Stevenson, WA. June 2010.

Approaching Amateurs Workshop at GROUP 2009.
Sanibel Island, FL. May 2009.

Posters

K. Panciera. Then When and Why of User Participation. WikiSym, October 2011.

K. Panciera. User Lifecycles in Cyclopath: A Survey of Users. iConference, February 2011.

K. Panciera, R. Priedhorsky, A. Halfaker, T. Erickson, and L. Terveen. Wikipedians? Cyclopaths? A Quantitative Analysis of Power Users in Online Communities. MinneWIC, February 2010. **Winner, Best Graduate Poster.**

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.

Conference Presentations

D. Riley and **K. Panciera.** Exposing the Hidden Curriculum with a First Year Computing Seminar. Lightning Talk at SIGCSE, March 2022.

K. Panciera. Promoting Student Mental Health During Personal, National, and Global Trauma. Teaching Professor Online Conference, October 2022.

K. Panciera. In the Beginning: The Early Lives of Users in Online Communities. Grace Hopper Celebration of Women in Computing, September 2010.

K. Rozier, K. Walcott, and **K. Panciera.** Choosing Your Building Bricks: How to Find Your Research Direction. Grace Hopper Celebration of Women in Computing, October 2008.

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

Service

Milwaukee School of Engineering

Explorer Pathway Committee	2023 - present
EECS First Year Programming Committee	2022 - present
Access Computing Representative	2022 - present
Withdrawal Task Force	2021 - 2022
Faculty Representative to UX Industrial Advisory Committee	2020 - present
Student Success Committee	2020 - 2021

Department of Computer Science and Engineering

University of Minnesota

Director of Graduate Studies Advisory Council	2007-2008
Ph.D. Student Evaluation Process Committee	2007-2008
Computer Science Graduate Association President	2007-2008
Computer Science Graduate Association Secretary	2006-2007

Berea College

Math and Computer Science Club President	2004-2005
Department of Math and Computer Science Faculty Recruiting Committee	2005
American Choral Directors Association Chapter President	2005
Math and Computer Science Club Secretary/Treasurer	2003-2004
Concert Choir Secretary/Treasurer	2002-2003

Coach for Interaction Design Studio (CS 247)

Winter 2015

Stanford University
Stanford, CA

I worked with a project team of three undergraduates to help them define and iterate on their design project (from foundational research through initial prototypes), as well as giving feedback and support throughout the course.

Technology Committee

Fall 2011 to Jan. 2013

Plymouth Congregational Church
Minneapolis, MN

I served on the technology committee which aimed to improve technology usage of the church through many different facets. During my tenure we worked to redesign the church website. As part of the process, I created wireframes, analyzed Google Analytics reports, and planned ways to engage congregants in the design process.

Whittier Elementary School Math Tutor

Jan 2007 to June 2009

Minneapolis, MN

Most recently, I spent an hour or more a week working with several second-grade girls on basic arithmetic. We worked in English and (rudimentary) Spanish. I have also worked with students in kindergarten, first, fourth, and fifth grade.

Service (Continued)

University of Minnesota Technology Day Camp Minneapolis, MN

August 2005, 2006, 2007

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.

Program Committee

2024 Annual Symposium on HCI Education (EduCHI)

2014 International Symposium on Wikis and Open Collaboration (OpenSym)

2012 International Symposium on Wikis and Open Collaboration (WikiSym)

Operations Committee

2014 Conference on Human Factors in Computing Systems (CHI) - Social Media Co-Chair

2013 Conference on Human Factors in Computing Systems (CHI) - Social Media Co-Chair

Conference Reviewer

CHI (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2018, 2019, 2020)

Conference on Computer Supported Cooperative Work (CSCW) (2011, 2012, 2013, 2014, 2015, 2016, 2018)

Conference on Innovation & Technology in Computer Science Education (ITiCSE) (2007, 2010, 2011)

Designing Interactive Systems (DIS) (2021)

Grace Hopper Conference Scholarships (2015)

iConference (2011)

IEEE International Conference on Robotics and Automation (ICRA) (2006, 2009)

IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) (2007)

International AAAI Conference on Weblogs and Social Media (ICWSM) (2011, 2012)

International World Wide Web Conference (WWW) (2008)

Symposium on HCI Education (EduCHI) (2024)

Technical Symposium on Computer Science Education (SIGCSE) (2008, 2011, 2024)

Usability Professionals' Association International Conference (UPA) (2011)

International Symposium on Wikis and Open Collaboration (WikiSym/OpenSym) (2009, 2010, 2012, 2013, 2014)

Professional Memberships

Association for Computing Machinery (ACM)

ACM Special Interest Group on Computer-Human Interaction

ACM Special Interest Group on Computers and Society

ACM Special Interest Group on Computer Science Education

Computer Science Teachers Association

User Experience Professionals' Association

Teaching and Mentorship

Spring 2024

- UXD 2040 People and Automation
- UXD 2961 Human Centered AI (1 credit online course)
- UXD 3030 Data Visualization
- UXD 4030 UX Strategy
- 13 Advisees

Fall 2023 - Under Semesters

- UXD 2010 Inclusive Design
- UXD 3010 UX Research (two sections)
- UXD 4901 Senior Design
- 17 Advisees
- Sat in on CSC 1110: Software Development for research purposes

Spring 2023 - Under Quarters

- SS 495 Cybercrime: Human Perspectives (Two sections)
- SS 3630 Design Thinking
- UX 4031 Senior Design
- Supervised 1 internship student (Concurrency, Inc.)
- Supervised 4 practicum students (CS Education Research, Data Visualization with Office of Academics, Social Media Marketing, Activision/Blizzard)
- Conducted CS Education Research with 1 student
- 10 Advisees

Winter 2022-2023

- UX 3021 UX Research II
- UX 3025 Data Visualization
- UX 4021 Senior Design
- Supervised 1 internship student (Concurrency, Inc.)
- Supervised 1 practicum student (Brady Corporation)
- 13 Advisees

Fall 2022

- UX 3011 UX Research I
- UX 253 Inclusive Design (Two sections)
- UX 4011 Senior Design
- Supervised 1 practicum student (ML/AI with Computer Science students)
- 15 Advisees

Spring 2022

- 100% in person
- SS 495 Cybercrime: Human Perspectives (Two sections)
- SS 3630 Design Thinking (Two sections)
- 20 Advisees

Teaching (Continued)

Winter 2021-2022

- 60% in person
- UX 1400 Foundations of User Experience
- UX 1400H Foundations of User Experience (Honors)
- UX 3021 UX Research II
- UX 3025 Data Visualization
- Supervised 1 internship student (Hanson Dodge)
- 17 Advisees

Fall 2021

- 100% in person
- UX 3011 UX Research I
- UX 253 Inclusive Design
- UX 1400 Foundations of User Experience (Two sections)
- Supervised 1 internship student (Ministry Brands)
- 15 Advisees

Spring 2021

- 100% online
- HU 494 Creative Thinking (Two sections)
- SS 3630 Design Thinking (Two sections)
- Supervised 1 internship student (Direct Supply)
- 14 Advisees

Winter 2020-2021

- 100% online
- SE 3830 Human Computer Interaction
- UX 241H Easy By Design
- UX 1400 Foundations of User Experience
- Supervised 1 internship student (Management Research Services, Inc.)
- 14 Advisees

Fall 2020

- 100% online
- UX 361 UX Research
- UX 253 Global UX
- UX 1400 Foundations of User Experience (Two sections)
- Supervised 1 practicum student (3Data)
- 14 Advisees

Spring 2020

- Emergency 100% online after 3 classes
- HU 494 Creative Thinking (Two sections)
- UX 1400 Foundations of User Experience
- Supervised 1 internship student (MGIC)

**Teaching
(Continued)**

Winter 2019-2020

- SE 3830 Human Computer Interaction (Two sections)
- UX 241H Easy By Design
- Supervised 2 internship students (Lift Up MKE)

Fall 2019

- UX 361 UX Research
- UX 253 Global UX