

BROOKE FOUCAULT WELLES

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EDUCATION

2006-Present **Northwestern University** Evanston, IL

PhD Candidate, Expected Graduation June 2012

- ♦ Dissertation Committee: Noshir Contractor (chair), Darren Gergle, Barton Hirsch
- ♦ Field: Communication
- ♦ Program: Media, Technology & Society
- ♦ Research Area: Online social relationship networks among adolescents and adults.

2001-2003 **Cornell University** Ithaca, NY

Master of Science, Summa Cum Laude, January 2003

- ♦ Thesis Committee: Geri Gay (chair), Joseph Walther, Dietram Scheufele
- ♦ Field: Communication
- ♦ Program: Human Computer Interaction (HCI)
- ♦ Research Area: Visual search interfaces for children.
- ♦

1998-2001 **Cornell University** Ithaca, NY

Bachelor of Science, Magna Cum Laude with Distinction in Research, May 2001

- ♦ Communication major with concentration in Science and Technology Studies (STS)
- ♦ Honors Thesis on social influence in online shopping decisions.
- ♦ Recipient of NY State Chancellor's Award for academic excellence.

ACADEMIC RESEARCH EXPERIENCE

2009-Present **SONIC Lab** Evanston, IL

Graduate Research Assistant, Social Network Analysis

Principle Student Investigator on the following projects:

- ♦ Friendship in Virtual Worlds: Mixed-methods investigation of the theoretical logics of online friendship formation.
- ♦ Age Prediction: Multi-sited, interdisciplinary research using social network analysis and data mining to predict real-world age based on online behavior.
- ♦ Groupscope: Multi-sited research on the effects of trust and communication networks on the performance of Multi-Team Systems.

2006-2009 **Articulab** Evanston, IL

Graduate Research Assistant, Technology & Social Behavior

Principle Student Investigator on the following projects:

- ♦ Survey Interview Project: Detailed behavioral analysis of face-to-face survey interviews in order to identify non-verbal correlates of survey rapport.
- ♦ Youth & Technology: Ethnographic and Social Network Analysis of communication technology use by teenagers (in collaboration with UC Irvine and Intel Research).
- ♦ Junior Summit: Analysis of data collected about an online community of 3000 youth from 139 countries.

Directed development of OWL-Engine search tool for 8-11 year-old children:

- ◆ Created and managed five member cross-disciplinary research and design team.
- ◆ Conducted and applied qualitative and quantitative research to interface design.
- ◆ Developed, conducted, and reported on evaluative studies with children of a variety of age and ability levels.

Collaborated on the following projects:

- ◆ GossipBot: Networked agent that uses gossip to promote sociability.
- ◆ Muse: Family communication and relationship building in museum spaces.

PUBLICATIONS & INTELLECTUAL PROPERTY

Journal Articles & Archival Conference Papers

1. Foucault, B. and Melican, J. (2007). The Digital and the Divine: Taking a Ritual View of Communication and ICT Interaction. *Proceedings of the 2007 Human Computer Interaction International Conference*. Beijing, China.
2. Cramer, M., Zutty, D., Foucault, B., Huffaker, D., Derby, D., and Cassell, J. (2007). Everything in Moderation: The Effects of Adult Moderators in Online Youth Communities. *Proceedings of the 2007 Communities & Technologies conference*. East Lansing, Michigan. **Selected for Presentation in Best Paper session.**
3. Foucault, B., Mentis, H., Sengers, P., and Welles, D. (2007). Provoking Sociability. *Proceedings of the CHI2007 conference on Human Factors in Computing Systems*. San Jose, CA, USA.
4. Woodruff, A., Augustin, S., and Foucault, B. (2007). Sabbath Day Home Automation: "It's Like Mixing Technology and Religion." *Proceedings of the CHI2007 conference on Human Factors in Computing Systems*. San Jose, CA, USA. **CHI Honorable Mention.**
5. Foucault, B. E. (2005). Contextualizing Cultures for the Commercial World: Techniques for Presenting Field Research in Business Environments. *Proceedings of the 2005 Human Computer Interaction International Conference*. Las Vegas, NV.
6. Foucault, B. E., Russell, R. S., and Bell, G. (2004). Techniques for Researching and Designing Global Products in an Unstable World: A Case Study. *Proceedings of the CHI2004 Conference on Human Factors in Computing Systems*. Vienna, Austria.
7. Foucault, B., and Scheufele, D. A. (2002). Web vs. Campus Store? Why Students Buy Textbooks Online. *The Journal of Consumer Marketing*, 19 (5), 409-423.

Book Chapters

1. Foucault Welles, B. (forthcoming). Big Data, Big Problems, Big Opportunities. In Hargittai, E. and Sandvig, C. *Digital Confidential*. Cambridge, MA: MIT Press.

Non-Archival Conference Papers, Posters, & Panels

1. Foucault Welles, B. & Contractor, N. (2011). From Strangers to Friends Online: A Mixed-Methods Investigation of Friendship Formation on the Internet. *Paper presented at the National Communication Association 97th Annual Convention*. New Orleans, LA, USA. **Top 4 Paper Selection in Human Communication Technology Division.**
2. Merrill, N., Foucault Welles, B. & Contractor, N. (2011). Virtual Group Commitment: An Examination of Factors Leading to Group Donation in Second Life. *Paper presented at the National Communication Association 97th Annual Convention*. New Orleans, LA, USA.
3. Foucault Welles, B., Shim, K. J., Ratan, R., Kennedy, T. L. M., Rouse, T., Contractor, N., Srivastava, J., & Williams, D. (2011). Disambiguating Age, Gender, and Skill: An Exploration of Online Chat Behaviors Among MMOG Players. *Paper presented at 2011 International Sunbelt Social Network Conference (XXXI)*. St. Pete Beach, FL, USA.
4. Foucault Welles, B., Van Devender, A. Contractor, N. (2010). Is a "Friend" a Friend?: Comparing the Structure of Online and Offline Friendship Networks. *Paper presented at 2010 International Sunbelt Social Network Conference (XXX)*. Riva del Garda, Trento, Italy.
5. Foucault Welles, B. (2010). Non-verbal Correlates of Rapport in Face-to-Face Survey Interviews: An Analysis of Interviewer Behavior. *Paper presented at 2010 American Association for Public Opinion Research (AAPOR) Conference*. Chicago, IL, USA.
6. Foucault Welles, B., Van Devender, A. & Contractor, N. (2010). Is a "Friend" a Friend? Investigating the Structure of Friendship Networks in Virtual Worlds. *Work-in-Progress Poster presented at the CHI2010 Conference on Human Factors in Computing Systems*. Atlanta, GA, USA.
7. Foucault, B., Aguilar, J., Miller, P., and Cassell, J. (2009). Nonverbal Correlates of Survey Rapport. *Paper presented at 2009 American Association for Public Opinion Research (AAPOR) Conference*, Hollywood, FL.
8. Foucault, B. and Markov, A. (2009). Teens and Communication Technology: The Co-Construction of Privacy and Friendship in Mediated Communication. *Paper presented at the 59th Annual Conference of the International Communication Association (ICA2009)*, Chicago, IL.
9. Foucault, B. Zhu, M., Huang Y. Atrash, Z, and Contractor, N. (2009). Will You Be My Friend? An Exploration of Adolescent Friendship Online in Teen Second Life. *Paper presented at the 59th Annual Conference of the International Communication Association (ICA2009)*, Chicago, IL.
10. Ratan, R., Chung, J.E., Shen, C., Williams, D., Foucault, B., and Poole, M.S. (2009). Schmoozing and Smiting: Trust and Communication Patterns in an MMO. *Paper presented at the 59th Annual Conference of the International Communication Association (ICA2009)*, Chicago, IL.
11. Foucault, B., Aguilar, J., Cassell, J., and Miller, P. (2008). When Encouraging Looks Go Too Far: Using Virtual Humans to Understand the Role of Rapport in the Survey Interview. *Paper presented at 2008 American Association for Public Opinion Research (AAPOR) Conference*, New Orleans, LA.
12. Foucault, B. and Boellstorff, T. (2008). Beyond Brothels and Boardrooms: Five Virtual World Domains that (Almost) No One is Talking About. *Paper presented at 2008 Cultures of Virtual Worlds Conference*, Irvine, CA.

13. Lockwood, K., Foucault, B., Tartaro, A., Zhao, X. (2007). We Invent the Future of Interdisciplinary Research. *Panel Discussion at 2007 Grace Hopper Celebration of Women in Computing*, Orlando, Florida.
14. Bell, G., Foucault, B., Harple, T. and Melican, J. (2006). The Digital and the Divine: Snapshots of Technology in Spiritual Passages. *Poster presented at Ethnographic Praxis in Industry Conference (EPIC) 2006*. Portland, OR, USA.
15. Goodman, E., and Foucault, B.E. (2006). Seeing Fit: Visualizing Physical Activity in Context. *Poster presented at CHI2006 Conference on Human Factors in Computing Systems*. Montreal, Canada.
16. Foucault, B.E. (2005). Aging in a New Place. *Poster presented at the Ethnographic Praxis in Industry Conference (EPIC) 2005*. Redmond, WA, USA.
17. Walther, J. B., Granka, L., Loh, T., and Foucault, B. (2003). Let me count the ways: Expression of affinity in computer-mediated communication and face-to-face interaction. Paper presented at the *2003 Annual Meeting of the International Communication Association*. San Diego, CA.
18. Foucault, B.E. and Gay, G. K. (2002). Considering the Role of Cognitive Development in Children's Search System Design: Making Children's Search Interfaces More Effective. *Paper presented at 11th European Conference on Cognitive Ergonomics: Cognition, Culture and Design*. Trento, Italy.

Doctoral Consortia, Workshops & Whitepapers

1. Foucault Welles, B. (2011). From Strangers to Friends Online: A Multi-Level, Multi-Theoretical Investigation of Friendship Formation on the Internet. *Paper presented at the Doctoral Consortium of the Communication and Technology Division of the International Communication Association*. Boston, MA, USA.
2. Goodman, E., Foucault, B. E., and Consolvo, S. (2005). Monitoring, measuring, and motivating exercise: Ubiquitous computing to support physical fitness. *Workshop organized at Seventh International Conference on Ubiquitous Computing (UbiComp)*. (W10). Tokyo, Japan.
3. Foucault, B.E. (2005). Designing technology for growing families. *Technology @ Intel Magazine*. August 2005. Available online at: <http://www.intel.com/technology/magazine/archive/research.htm> (industry whitepaper).

Patents

1. Welles, D. W. and Foucault, B. E. (2010). *A system and device for monitoring and assisting human gross motor skills II*. U.S. patent number 7,850,240.
2. Welles, D. W. and Foucault, B. E. (2008). *A system and device for monitoring and assisting human gross motor skills I*. U.S. patent number 7,461,896.
3. Foucault, B. E. and Russell, R. S. (2007). *Method and system for augmenting a physical artifact with a digital story*. U.S. patent application number 20070011141.

MANUSCRIPTS UNDER REVIEW

1. Foucault Welles, B., Rouse, T., Merrill, N. and Contractor, N. Virtually Friends: An Exploration of Friendship Claims and Expectations in Immersive Virtual Worlds.
2. Foucault Welles, B. and Contractor, N. From Strangers to Friends Online: A Mixed-Methods Investigation of Friendship Formation on the Internet.

INVITED TALKS & GUEST LECTURES

1. Foucault Welles, B. (2010 & 2011). Designing for Family Communication. *Guest Lecture for Family Communication Behavior course, Northwestern University, Evanston, IL.*
2. Foucault Welles, B. (2010). Adolescent Friendship: Online and Offline. *Guest Lecture for Children's Culture course, Northwestern University, Evanston, IL.*
3. Foucault Welles, B. (2010). Non-Verbal Correlates of Rapport in Face-to-Face Survey Interviews: An Analysis of Interviewer Behavior. *Invited talk at University of Michigan Survey Research Center Symposium, Ann Arbor, MI.*
4. Foucault Welles, B. (2010). Making Friends in Virtual Worlds. *Invited talk at Northwestern University's Virtual Worlds Symposium, Evanston, IL.*
5. Foucault, B. (2008). HCI for the Public Good: Developing Socially Interactive Virtual Human Survey Interviewers. *Invited talk at 2008 IBM Research HCI Symposium, Hawthorne, NY.*

AWARDS & HONORS

Grants & Scholarships

Northwestern University Graduate Research Grant, 2011 (\$2,395)
IBM Human-Computer Interaction Symposium Presenter, 2008 (\$500)
Charles Cannell Fund for Research in Survey Methodology, 2008 (\$9,500)
National Science Foundation Travel Scholarship, 2007 (\$265)
Intel Research Named Fellowship, Winter & Spring 2008 (\$40,000)
Northwestern University School of Communication Innovations Grant, 2007-2008 (\$5,000)
Thomas B. Bush Memorial Scholarship for Academic Achievement, 1999 & 2000 (\$10,000/year)
Mary Miller Lyons Scholarship for Academic Achievement, 2000 & 2001 (\$5,000/year)

Academic Recognition

Top 4 Paper Selection, National Communication Association Conference, 2011
Featured in Northwestern University's Graduate Research Highlights, 2008
Best Paper Award, Communities and Technologies Conference, 2007
Best Paper Nomination, CHI Conference, 2007
New York State Chancellor's Award for Academic Excellence, 2001
Mortar Board National Honor Society Member, inducted in 2000
Golden Key National Honor Society Member, inducted in 2000

TEACHING EXPERIENCE

Instructor

Social Network Analysis, Spring 2012

Introductory theory and methods class, 100 students

Teenagers and Communication Technology, Junior Seminar, Winter 2012

Writing-intensive communication seminar, 20 students

Applied Design Research Methods for Intel Engineers, 2004-2006

1-week intensive methods course for professional engineers, taught in US and China

Independent Study Supervisor

Max Groner, *Measuring Social Status and Popularity in Virtual Worlds*, Summer 2011

Michael Chua, *Communication in Multi-Team Systems*, Spring 2011

Nick Merrill, *Intellectual Property in the Digital Age*, Winter 2011

Katherine Wong, *Online Friendship Expectations*, Fall 2010

Rick Swette, *Interactive Virtual Human Survey Interviewers*, Spring 2008

Teaching Assistant (Northwestern University)

Introduction to Mediated Communication, Freshman Course, Spring 2010

Advised students, evaluated assignments, and assisted with exam development.

Theories and Technologies for Human Communication, Graduate Course, Fall 2007

Assisted students and evaluated class projects.

Great Minds in Social Science, Graduate Seminar, Spring 2007

Co-designed course, created syllabus, and led class discussions.

Teaching Assistant (Cornell University)

Information and Communication Technology, Sophomore Course, Fall 2002

Led laboratory sessions and advised student research projects.

Human Computer Interaction, Graduate Course, Spring 2002

Developed course outline, selected readings, and led class discussions.

Computer Mediated Communication, Senior Course, Spring 2002

Assisted with course design, gave lectures and evaluated student work.

Oral Communication, All Levels, Summer & Fall 2001

Instructed and evaluated students, graded written coursework.

PROFESSIONAL EXPERIENCE

2003-2006

Intel Corporation

Hillsboro, OR

Design Researcher

- ◆ Led interdisciplinary product development teams investigating next-generation home and health products for the North America, Asia, and Europe.
- ◆ Defined new business opportunities by applying qualitative research on learning, gaming, internet cafes, small businesses, family communication, mobility, spiritual practice and home health.
- ◆ Created new, interactive techniques for representing and communicating research results to product development and engineering teams.
- ◆ Authored use cases, personas, and experience scenarios to guide technical platform-level product definitions for home, office, and health.

2003

Zanthus

Portland, OR

Research Consultant

- ◆ Collected and synthesized requirements for digital calendaring system design.
- ◆ Conducted lab-based and in-situ usability analyses of digital interfaces for the home.

SERVICE

Volunteer Activities

President and Co-Founder, Northwestern Student Parents Support Group, 2009-2011

Ally, Northwestern University Safe Space Program, since 2009

Orientation Volunteer, Northwestern Graduate Orientation, 2008-2009

Posters Co-Chair, Conference on Interaction Design for Children (IDC), 2008

Vice President, Female Researchers in EECS, Northwestern University, 2007-2008

Member, Intel Research User Interface External Grant Review Committee, 2005-2006

President, Cornell SIGCHI Student Group, 2002

Reviewing Experience

American Medical Informatics Association Annual Symposium (AMIA), 2011

Ethics and Information Technology, 2011

Conference on Human Factors in Computing Systems (CHI), 2006-2011

International Communication Association Conference (ICA), 2008-2011

National Communication Association Annual Convention (NCA), 2008-2011

American Association for Public Opinion Research (AAPOR), 2009-2010

International Conference on Ubiquitous Computing (UbiComp), 2006-2008

Ethnographic Praxis In Industry Conference (EPIC), 2006-2008

Computer Supported Cooperative Work Conference (CSCW), 2008

Journal of Interactive Advertising, 2008

Transactions on Computer-Human Interaction (TOCHI), 2007

Feminist Media Studies, 2007

Personal and Ubiquitous Computing Journal special issue on IT@Home, 2005

Designing for the User Experience (DuX) Conference, 2005

Interacting with Computers Journal special issue on HCI and Elders, 2005

Professional Memberships

American Association for Public Opinion Research (AAPOR), since 2008

National Communication Association (NCA), since 2007

International Communication Association (ICA), since 2006

ACM SIG CHI, since 2002