

W E N D Y J U

727 College Ave, Palo Alto CA 94306
650.575.6626
wendyju@stanford.edu
www.wendyju.com

I apply a broad range of design capabilities to exploration and development of new applications and interfaces. My particular expertise is in creating physical and digital interfaces that implicitly communicate with users without distracting them from their primary task. My research interests include interaction design prototyping, human-robot collaboration and physical interaction design instruction.

E D U C A T I O N

- JUNE 2008 Stanford University, Stanford, CA
Ph.D. in Design, Mechanical Engineering
DISSERTATION: The Design of Implicit Interactions
COMMITTEE: Larry Leifer, Terry Winograd, Clifford Nass, Edward Carryer, Donald Norman, Scott Klemmer.
- AUGUST 2001 Massachusetts Institute of Technology, Cambridge, MA
M.S. Media Arts and Sciences
THESIS: The Design of Active Workspaces
COMMITTEE: Michael Hawley, Joseph Paradiso, Chee Pearlman (design consultant)
- JUNE 1997 Stanford University, Stanford, CA
B.S. with Distinction, Mechanical Engineering. TAU BETA PI.

R E S E A R C H A C T I V I T Y

- SEPTEMBER 2008 – PRESENT Post-doctoral Researcher, Center for Design Research
Stanford University, Stanford, CA
Research on the role of embodiment in design thinking. Project and experiment designs include creating robots for mediating distance collaboration and physical actuation in information kiosks.
- SEPTEMBER 2001 – JUNE 2008 Research Assistant, Center for Design Research
Stanford University, Stanford, CA
Research projects included embedded health assessment in cars, design and development of collaborative workspace capture systems and controlled experimental research on interactive agents in education. Collaboration with NASA Ames, Xerox PARC, Fakespace Labs, KTH (Sweden), Kyoto University, Intel & HPI Potsdam.
- JUNE 1999 – AUGUST 2001 Research Assistant, MIT Media Laboratory
Massachusetts Institute of Technology, Cambridge, MA
Investigated the use of computer and sensing technologies for assisting human work in the physical domain. Collaborated with Motorola, Merloni Domesticii (Italy), & Kraft Foods.

PROFESSIONAL ACTIVITY

- FALL 2006 – PRESENT Editor-at-Large
WINTER 2005 – Founder & Editor-in-Chief
SUMMER 2006 *Ambidextrous Magazine, Stanford, CA*
Founded quarterly cross-disciplinary, cross-market print magazine for Stanford d.school, and Center for Design Research to create forum for the academic and professional design community.
- AY 2002-2004 Editor-in-Chief & Coordinator
SUMMER 2002 Reporter
ACM SIGGRAPH Reporters Program
Supervised program for corps of six student reporters to canvass ACM SIGGRAPH conference for online publication. Introduced real-time conference report posting.

INDUSTRY EXPERIENCE

- SUMMER 2005 Intel Corporation, Portland, OR
Intern, Digital Health Group
Developed and prototyped networked mobile phone application on Series60 Nokia to capture and remotely log pulse rate information from Bluetooth device.
- SUMMER 2002 Motorola, Inc., Mountain View, CA
Research Intern, Silicon Valley Research Center
Developed design for handheld device with embedded sensors to infer user location.
- SUMMER 2000 Motorola, Inc., Cambridge, MA
Consultant, Cambridge Research Center
Developed interface, mechanical design of a wireless handheld Linux server.
- JUNE 1997 – Silicon Graphics, Inc., Mountain View, CA
JUNE 1999 *Product Design Engineer, Advanced Systems Division.*
Designed embedded system controller infrastructure to help technicians diagnose, service, and maintain Origin 2000 scalable servers.

TEACHING EXPERIENCE

- FALL 2008 - PRESENT Assistant Professor
GRADUATE PROGRAM IN DESIGN California College of the Arts
Teach original studio design courses in interaction design & advise thesis work for transdisciplinary master's program in design.
- FALL-WINTER 2008-09 Instructor
MUSIC250A&B Physical Interaction Design, Stanford CCRMA
Guide graduate students in employing embedded controllers and sensor technology to create new musical controllers for Stanford's Center for Computer Research in Music and Acoustics.
- JULY 2005, JUNE 2009 Co-Instructor
CCRMA SUMMER WORKSHOP Physical Interaction Design, Stanford
Instruct diverse students in basic electronics, embedded development and patch programming to create new musical controllers. Lecture, design daily labs, coach projects. With Matthew Wright (2005) and Edgar Berdahl (2009).

WINTER 2008, 2009 Co-Instructor
ENGR231 Transformative Design, Stanford d.school
Designed new advanced graduate course focused on recognizing and harnessing social, cultural and behavioral factors in design for health, conservation & safety. Co-teach class with Bernard Roth, Sarah Lochlann Jain & Bill Moggridge.

SPRING 2008 Instructor
IEOR170 Industrial Design & Human Factors, UC Berkeley
Lead survey course on industrial design & human factors. Class features lectures, historical & contemporary case studies, design exercises and a major design project.

PUBLICATIONS

- JOURNAL PAPERS Ju, W., & Leifer, L. (2008). The Design of Implicit Interactions: Making Interactive Objects Less Obnoxious. *Design Issues: Special Issue on Design Research in Interaction Design*, 24(3), Summer 2008, 72-84.
- CONFERENCE PAPERS (REFEREED) Ju, W., Lee, B., & Klemmer, S. (2008) Range: Exploring Implicit Interaction through Electronic Whiteboard Design. In CSCW'08 Proceedings of Computer Supported Cooperative Work, 17-26.
- Ju, W., Takayama, L. (2008) Approachability: How People Interpret Automatic Door Movement as Gesture. In Proceedings of Design & Emotion 2008.
- Takayama, L., Ju, W. & Nass, C. (2008). Beyond Dirty, Dangerous and Dull: What Everyday People Think Robots Should Do. In HRI '08 Proceedings of Conference on Human Robot Interactions.
- Ju, W., Lee, B.A., & Klemmer, S.R. (2007). Range: Exploring Proxemics in Collaborative Whiteboard Interaction. In CHI '07 Extended Abstracts on Human Factors in Computing Systems, San Jose CA, USA.
- Klemmer, S. R., Verplank, B., & Ju, W. (2005). Teaching embodied interaction design practice. In DUX '05 Proceedings of the 2005 conference on Designing for User eXperience, San Francisco CA, 26-34.
- Ju, W., Nickell, S., Eng, K., & Nass, C. (2005). Influence of collearner agent behavior on learner performance and attitudes. In CHI '05 Extended Abstracts on Human Factors in Computing Systems, Portland OR, USA, 1509-1512.
- Ju, W., Ionescu, A., Neeley, L., & Winograd, T. (2004). Where the wild things work: capturing shared physical design workspaces. In CSCW '04 Proceedings of the 2004 ACM Conference on Computer Supported Cooperative Work, Chicago, Illinois, USA, 533-541.
- Ju, W., Madsen, S., Fiene, J., Bolas, M., McDowall, I., Faste, R. (2003) Interaction Devices for Hands-on Desktop Design. In Proceedings of SPIE/IS&T Vol 5006. Conference on The Engineering Reality of Virtual Reality. Santa Clara CA, 585-595.

Ju, W., Bonanni, L., Fletcher, R., Hurwitz, R., Judd, T., Post, R., Reynolds, M., Yoon, J. (2002). Origami Desk: integrating technological innovation and human-centric design. In DIS '02 Proceedings of the conference on Designing Interactive Systems London, England, 399-405.

Ju, W., Hurwitz, R., Judd, T., & Lee, B. (2001). CounterActive: an interactive cookbook for the kitchen counter. In CHI '01 Extended Abstracts on Human Factors in Computing Systems, Seattle, Washington, 269-270.

Dobson, K., boyd, d., Ju, W., Donath, J., & Ishii, H. (2001). Creating visceral personal and social interactions in mediated spaces. In CHI '01 Extended Abstracts on Human Factors in Computing Systems, Seattle WA, 151-152.

CHAPTERS Ju, W. (2008). The mouse, the demo & the big idea. In T. Erickson and D. McDonald (Eds.), *HCI Remixed*. Cambridge MA: MIT Press.

CONFERENCE PAPERS (NON-REFEREED) Ju, W., Oehlberg, L., Leifer, L. (2004). Project-based learning for experimental design research. In Proceedings of International Education and Product Design Education Conference, Delft, The Netherlands.

Leifer, L., Culpepper, J., Ju, W., Cannon, D.M., Eris, O., Liang, T., Bell, D., Bier, E.A., Pier, K. (2002). Measuring the performance of online distributed team innovation (learning) services," In Proceedings of e-Technologies in Engineering Education. Davos, Switzerland.

PANELS, DEMOS & EXHIBITS Ju, W., organizer. (2004) Panel: Trading design spaces: exchanging ideas on physical design environments. Margot Brereton, Michael Haller, Amanda Parkes, Scott Klemmer, Brian Lee, Dan Rosenfeld, panelists. In CHI '04 Extended Abstracts on Human Factors in Computing Systems, Vienna, Austria, 1582-1583.

Ju, W. (2002) Hands-On Interactive Demo: Origami Desk. At CHI '02 Conference on Computer-Human Interactions, April 20-25, 2002, Minneapolis MN.

Special Exhibit: Origami Desk. (2002) Boston Museum of Science. March 24-31.

Mountford, S Joy, organizer. (2002) Panel: Can we learn anything about the process of UI design? Sally Grisedale, Jan-Christoph Zoels, Ramia Mazé, Monica Bueno, Wendy Ju, panelists. In DIS '02 Proceedings of the Conference on Designing Interactive Systems: Processes, Practices, Methods, and Techniques, London, England, 26-31.

Ju, W., Bonanni, L., Fletcher, R., Hurwitz, R., Judd, T., Post, E.R., Reynolds, M., Yoon, J. (2001) Emerging Technologies Exhibit: Origami Desk. In SIGGRAPH 2001, Extended Abstracts for Conference on Computer Graphics and Interactive Techniques. August 2001. Los Angeles CA, 130.

WORKSHOP PAPERS & PRESENTATIONS Ju, W. (2007) Design, Design & Design: An overview of Stanford's Center for Design Research. Position paper for Workshop on Exploring Design as a Research Activity, CHI 2007, April 2007, San Jose CA.

Ju, W. (2006) Drawn Together. Invited presentation & position paper for Workshop on Sketching Nurturing Creativity, CHI 2006, April 2006, Montreal, Canada.

Ju, W. (2005) CardioCar: Embedded Assessment on the Go. Invited presentation for Workshop on HCI challenges in Health Assessment, CHI 2005, April 2005, Portland OR

Ju, W., Oehlberg, L. (2004) The iX experience: Project-based Learning in HCI Design. Position paper for Workshop on Exploring the Relationship between Design and HCI, CHI 2004, Vienna, Austria.

Ju, W., Culpepper, J. (2004) Self-organizing Documentation Capture and Retrieval for Robotic Teleoperations Support. In Abstracts of Habitation 2004, January 2004, Orlando FL, 173-4

Ju, W. (2002) Origami Desk: Integrating Technological Innovation and Human-centric Design. Position paper for Look Mama, *with* Hands! Research Workshop, DIS '02. June 25, 2002, London UK.

RECOGNITION

HONORS & AWARDS Intel Foundation PhD Fellowship, Stanford University, AY 2005 - 2007

First Prize, Motorola "Big Idea" Competition, for design of "HitchHiker's Guide" a network connected and context-aware electronic guidebook. *With Thai Tran*. Stanford University, SPRING 2002

McDonald's Fellowship, MIT Media Lab, FALL 2000.

Best Prototype, Interval Research Design Competition. SUMMER 1997

TAU BETA PI, Stanford University, AY 1994-1997

National Merit Scholar, 1993

SELECTED PRESS WINTERHOUSE INSTITUTE, "Volume One. Number One." *Below the Fold*, Vol.1(1)
COVERAGE Spring 2006, p. 5.

Mary Fichter. "Ambidextrous Design." *STEP Inside Design*. Vol 22(2) March/April 2006, p. 25.

Food Network. "Kitchens of the Future." Special Feature. Airdate January 18, 2004.

Genevieve Bell & Joseph Kaye. "Designing technology for domestic spaces: A Kitchen Manifesto." *Gastronomica*, Spring 2002, p. 46-62.

Ogama Kenji. "Origami Desk" (in Japanese), in Digital Stadium, Documentary broadcast on NHK (Japan Broadcasting Corporation), Airdate September 22 (#63) & 29 (#64), 2001.

Staff. "Pengachu." *FRAMES (MIT Media Lab)*, February 2001, No.102, p. 2.

Earl C. Joseph. "Year 2000 & Beyond Computers." *MnIPS (Minnesota Information Professional Society)*, Vol 1(4), January 2000, p.1.

Staff. "Counter Intelligence." *FRAMES*, January 2000, No. 93, p. 2.

David Colker. "Culinary Curiosities/How video-projected recipes and dinner-table screens may help bring households together" *Los Angeles Times*, November 8th 2000. p. C-14.

Lee Ridgway. "Counter Intelligence Cooks up Technology for the Kitchen." *MIT Information Services & Technology*, Vol.15(6) July/August 2000. p. 1.

Richard Wolkomir. "Will the Kitchen Please Shut Up!" *Smithsonian Magazine*, Vol.30(6) September 1999, p. 56-69.

Anthony Moor. "Bay Area 2020 (Part 3)." *KRON 4 News*. Airdate November 18, 1999.

OTHER PROFESSIONAL ACTIVITY

SERVICE ACM SIGGRAPH 2009 (International Conference on Computer Graphics and Interactive Techniques) Interactive Music Special Projects Coordinator
ACM DUX 2007 (Designing User eXperiences) Student Volunteer Coordinator
ACM SIGGRAPH 2005 – 2007 Sketches Committee
ACM CHI 2007 (Conference on Human Factors in Computing Systems) Technical Program Committee, Student Volunteer
NEEDS Premier Award for Excellence in Engineering Education, Member of judging panel, 2002-2003
Peer Reviewer for:
ACM CHI, ACM SIGGRAPH, ACM CSCW (Computer Supported Cooperative Work), & ACM UIST (Symposium on User Interface Software and Technology)

INVITED TALKS "The Design of Implicit Interactions." IBM Almaden Research Lab, San Jose CA. November 29, 2006.
"The Design of Implicit Interactions." Berkeley Institute of Design/Berkeley Expert Systems Technology Symposium, Berkeley CA. November 15, 2006.
"The Emperor's New New Clothes: The Challenges of Designing Implicit Interactions." SIGCHI Distinguished Lecture Series. Cornell University, Ithaca NY, May 4, 2005.
"Active workspaces." Lecture at Digital Media & Design Program, FH-Hagenberg, Austria. April 30, 2004.

ACADEMIC & RESEARCH ADVISING	Lora Oehlberg <i>Currently PhD student in at UC Berkeley Institute of Design, & Ambidextrous editor</i>	SUMMER 2001 – PRESENT
	Corina Yen <i>Currently employee of Luidia & Ambidextrous editor</i>	SUMMER 2001 – PRESENT
	Joanna Gubman <i>Currently co-terminal student at Stanford in Mechanical Engr., & Ambidextrous staff</i>	SUMMER 2001
	Seth Nickell <i>Currently working freelance as HCI consultant</i>	WINTER 2003 – SPRING 2003
	Katherine Eng <i>Currently working at NASA Ames Research Center</i>	WINTER – SPRING 2003

Tilke Judd <i>Currently PhD student at CSAIL, MIT</i>	SEPTEMBER 1999 – AUGUST 2001
Becky Hurwitz <i>Currently PhD student at iSchool, Berkeley</i>	MARCH 2000 – AUGUST 2001
Jenn Yoon <i>Currently at Rutgers School of Law – Camden</i>	AUGUST 2000 – AUGUST 2001
Bonny M Lee <i>Currently at Harvard Medical School, researching Alzheimer's disease</i>	SEPTEMBER 1999 – MAY 2000
Camilo Guáqueta <i>Currently PhD student in Material Science at University of Illinois, Urbana Champaign</i>	JANUARY 2000 – MAY 2000

ASSOCIATIONS American Society of Mechanical Engineers
Association of Computer Machinery
Industrial Design Society of America