

EDUCATION

University of Washington, Seattle, WA

Ph.D. in Educational Psychology

Expected: 2011

Area of Concentration: Learning Sciences

Research: Investigate user expectations of humanoid robots (roles, behaviors, appearance, communication) in learning situations to aid in the development of androids that are effective in human collaborative/team or training situations, especially in stressful conditions (e.g., space, defense, or humanitarian relief).

Rensselaer Polytechnic Institute, Troy, NY

M.S. in Technical Communication

2004

Area of Concentration: Human-Computer Interaction

Certificate: Human-Computer Interaction

University of Wisconsin, Madison, WI

B.A. in Communication Arts

1999

Area of Concentration: Film, Radio and Television Theory

PUBLICATIONS AND PRESENTATIONS

(Name appears as both **J. Carpenter** and **J. Hillan**)

Book Chapter

Carpenter, J. (In press). Just Doesn't Look Right: The impact of humanoid robots in Explosive Ordnance Disposal teams. Manuscript submitted for publication. R. Luppicini, (Ed.) In *Handbook of research on technoself: Identity in a technological society*. Hershey, PA: IGI Global.

Dissertation

Carpenter, J. (2011). Explosive Ordnance Disposal specialists' everyday user experiences with robots: From training through deployment. Unpublished raw data. University of Washington, Seattle.

Book Manuscript

Carpenter, J. & Prather, M. (2006). *Contents under pressure: Web content management with limited staff, time, and budget*.

Peer-Reviewed Journals

Carpenter, J., Davis, J., Erwin-Stewart, N., Lee, T., Bransford, J. & Vye, N. (2009). Gender representation in humanoid robots for domestic use. *International Journal of Social Robotics* (special issue). 1 (3), 261-265. The Netherlands: Springer.

Reichenbach, J., Bartneck, C., & **Carpenter, J.** (2008). The Carrot and the stick - The role of praise and punishment in human-robot interaction. *Interaction Studies: Social Behaviour and communication in biological and artificial systems*; special issue of on "Human and robot interactive communication." 9 (2), 179-203. Oxford, UK: Ingenta.

Hillan, J. (October, 2003). Physician use of patient-centered Web logs and journals. *Clinical Medicine and Research*. 1(4), 333-334. Stanford, CA: Stanford University Libraries.

Hillan, J. (July, 2003). PatchWorx: Connecting ill and disabled children in an online community. *Clinical Medicine and Research*. 1(3), 259-260. Stanford, CA: Stanford University Libraries.

Peer-Reviewed Conference Proceedings – Full Papers

- Carpenter, J.** (2009). Why send the Terminator to do R2D2s job?: Designing androids as rhetorical phenomena. *Proceedings of HCI 2009: Beyond Gray Droids: Domestic Robot Design for the 21st Century*. Cambridge, UK. Sept. 1.
- Carpenter, J.,** Davis, J., Erwin-Stewart, N., Lee. T., Bransford, J. & Vye, N. (2008). Invisible machinery in function, not form: User expectations of a domestic humanoid robot. *Proceedings of 6th conference on Design and Emotion*. Hong Kong, China.
- Carpenter, J.,** Eliot, M. & Schultheis, D. (2006). Machine or friend: understanding users' preferences for and expectations of a humanoid robot companion. *Proceedings of 5th conference on Design and Emotion*. Göteborg, Sweden.
- Reichenbach, J., Bartneck, C., & **Carpenter, J.** (2006). Well done robot! The importance of praise and presence in human-robot collaboration. *Proceedings of RO-MAN 06: The 15th IEEE International Symposium on Robot and Human Interactive Communication*, 86-90. Hatfield, UK.
- Bartneck, C., Reichenbach, J., **Carpenter, J.,** & Hupfeld, F. (2006). Use of praise and punishment in human-robot collaborative teams. *Proceedings of RO-MAN 06: The 15th IEEE International Symposium on Robot and Human Interactive Communication*, 177-182. Hatfield, UK.

Peer-Reviewed Conference Proceedings – Short Papers and Presentations

- Carpenter, J.,** Davis, J. Erwin-Stewart, N. Lee. T., Bransford, J. & Vye, N. (2008). *Gender representation in humanoid robots for domestic use*. 1st International Conference on Human-Robot Personal Relationships. June 12-13. Maastricht, The Netherlands.
- Carpenter, J.,** Eliot, M. & Schultheis, D. (2006). The Uncanny Valley: Making human-nonhuman distinctions. *Proceedings of the 5th International Conference on Cognitive Science*, 81-82. Vancouver, B.C., Canada.
- Carpenter, J.** (2006). *Exploring Human-Centered Design in Human Robot Interaction*. Presented at HRI Young Researchers Workshop, in conjunction with HRI 2006. Salt Lake City, UT.
- Hillan, J.** (2005) The necessity of enforcing multidisciplinary research and development of embodied Socially Intelligent Agents. *Proceedings of AISB '05*. (British) Society for the Study of Artificial Intelligence and the Simulation of Behaviour, 133-140. Hertfordshire, UK.

RESEARCH EXPERIENCE

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|---|------------------|
| <p><i>University of Washington, Seattle, WA</i>
"Assistant Director, Engineering Communication Program"
Graduate Research Associate – Karen Kasonic
Managed the Engineering Writing Center (EWC). Hired and trained undergraduate peer tutors for the EWC; scheduled, tracked usage, offered workshops, and visited classes to promote the EWC services. Assisted the Director with TA support and training (for 231 and 333 TAs), developed workshops for faculty in the College of Engineering, and wrote proposals for funding and special topics courses.</p> | 2007-2008 |
| <p><i>University of Washington, Seattle, WA</i>
"Curriculum Design and Engineering Writing"
Directed Research – Karen Kasonic
Researched and developed curriculum for grant writing workshops hosted by the Department of Technical Communication. Reviewed current TC 333 curriculum and collaborated to develop new teaching materials. Collected, organized and archived original classroom materials developed by current TC 333 Teaching Associates, including lecture notes and supplementary materials such as PowerPoint and instructions for group exercises.</p> | 2006-2007 |

Julie Carpenter
julie4@u.washington.edu

University of Washington, Seattle, WA 2005
"Internet-Based Research/Examining Computer Supported Cooperative Work"

Directed Research – Dr. Jan Spryridakis
Used the Internet to empirically study the effectiveness of electronically delivered information. Worked on refining an Internet-based research tool, study of information design on users' behavior and performance in computer supported cooperative work environments, with a specific focus on the assessment of wikis. Identified questions and subjects for study, read relevant literature and collaborated on experiment design.

University of Washington, Seattle, WA 2004-2005
"Hall Health, AEDSports.com"

Graduate Research Associate – Dr. Jonathan Drezner
Assembled Web design team and supervised two undergraduate Research Assistants. Managed the development of two Web sites: (a) a Web-based survey on NCAA AED <aedsports.com> use and (b) a Web-based interface for online survey database administration.

University of Washington, Seattle, WA 2004-2005
"Computer Games"

Directed Research – Dr. Beth Kolko
Researched the cultural aspects of games, including a project of player-avatar identification in EverQuest.

TEACHING EXPERIENCE

University of Washington, Seattle, WA 2009-2011
Teaching Assistant – College of Education
"Writing Center"

Managed the College of Education Writing Center. Created center schedules, tracked usage, offered writing workshops, and visited classes to promote the writing center services. Developed workshops for undergraduate and graduate students in the College of Education.

University of Washington, Seattle, WA 2008-2009
Teaching Assistant – Teacher Education Program
"Math Methods, Dilemmas of Teaching and Learning, Arts & Technology" & "Teaching for Learning & Adolescent Development"
Collaborated on curriculum development; led discussions. Graded written work.

University of Washington, Seattle, WA 2008
Teaching Assistant - TC 502
"Empirical Traditions in Technical Communication"
Collaborated on curriculum development; lead discussions. Graded all written work.

University of Washington, Seattle, WA 2005-2007, 2008
Teaching Assistant - TC 333
"Advanced Technical Writing and Oral Presentation"
Taught all lectures. Developed course materials and learning activities, met with students and graded all written work and oral presentations.

Julie Carpenter
julie4@u.washington.edu

University of Washington, Seattle, WA

2004, 2008

Teaching Assistant - TC 231

"Introduction to Technical Writing"

Taught all lectures. Collaborated in curriculum and exam development, met with students and graded all written work, including mid-term and final exam papers.

University of Washington, Seattle, WA

2007, Summer

Tutor - Engineering Writing Center

Supported undergraduate engineering students improving and learning new writing skills. Focused on developing student skills through discussion and discovery in individual sessions.

PROFESSIONAL EXPERIENCE

Zygotics

Consultant

2009

Worked with a geographically dispersed interdisciplinary team to develop an online presence for Zygotics, a Robotics 2.0 startup specializing in open source human-robot interaction (HRI) and humanoid robotics research and manufacturing in the United States. Researched and wrote reports about user experience and Web Content Management practices for Zygotics.

Marshfield Clinic, Marshfield, WI

2001-2004

Web Content Developer

Designed interfaces of Web sites/applications, including remote usability testing software. Established user-centered Web design methods; responsible for all Marshfield Clinic Web-based application usability testing (from recruiting to data interpretation to final report write-up and presentation of results). Conducted heuristic evaluations, formal user testing, focus groups, and contextual inquiries. Created prototypes, mockups, and web pages for external and internal sites. Compiled reports, including statistical and market trends, to track Web ROI metrics. Researched and reported on competitive intelligence information. Created corporate intranet style guide, enforced consistency among Web site's pages and sub-sites. Provided as-needed editorial support, including copy editing of the internal online and printed documentation. Wrote manuals, help and tutorials for Web sites and software applications.

Wisconsin Bankers Association, Madison, WI

Communications/Web Specialist

2000-2001

Supervised production schedules for two corporate Web sites; conceptualized and directed complete design process. Acted as Webmaster and Web editor. Developed Web site marketing plan, including establishing policy regarding use of corporate colors and logo on Web, Web advertising price structure, brochures and other marketing materials.

Wisconsin Bankers Association, Madison, WI

Communications/Web Administrator

1999-2000

Developed information structure for the corporate Web site, coordinated production of the site from design through launch. Edited and updated site content. Wrote Web copy, media talking points, press releases and newspaper articles. Edited monthly publication (print and hard copy), *Bankers Marketplace*.

ACADEMIC SERVICE

- *Graduate & Professional Student Senate (GPSS), "Senator," 2006-2007*
- *UWTC Undergraduate Admissions Committee, "Graduate Student Representative (voting member)," 2005-2007*
- *Association for Computing Machinery Special Interest Group – Computer-Human Interaction, "Officer (UW Chapter)," 2004-2006*
- *Forum on Science Ethics & Policy, 2007*

SOFTWARE DEVELOPMENT & DESIGN

Marshfield Clinic, "MyClinic," 2001-2004

- Researched and developed an in-house solution to patient and physician access to online medical records, working continuously (2001-2004) with various internal departments.
- Conducted all usability testing for application from 2001-2004, including task analysis, cognitive walkthroughs, diary studies, questionnaires and interviews.

Marshfield Clinic, "The Hive," 2004

- Created an in-house solution to prioritize projects for the intranet and Internet.
- Evaluated the current system and modified elements to integrate them into new organizational system and communication center.
- Accommodated new Clinic business initiatives and supported current ones.
- Facilitated responding to internal clients in a timely manner.
- Kept the communication loop open between all staff and the Web team.
- Included a Project Prioritization calculator that used business and human factors metrics to aid business decisions.

VOLUNTEER SERVICE

- *Catlick Records, 2009-present*
- *Soldiers' Angels, 2006-present*
- *PatchWorx, Inc., 2002-2004*
- *Saint Joseph's Hospital Home-Delivered Meal Program, 2002-2004*

AWARD

Travel Stipend for NSF-Supported Young HRI Researchers Workshop
Awarded a competitive stipend for travel/accommodation to a graduate workshop for young researchers in human-robot interaction hosted at the ACM's first annual HRI conference in Salt Lake City, UT.

2006

PROFESSIONAL AFFILIATIONS

- Association of Computing Machinery
- Cognitive Science Society
- Design & Emotion Society