

# Sarah Swierenga, Ph.D., C.P.E.

Director, MSU Usability & Accessibility Center  
Michigan State University, East Lansing, MI  
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## Summary of qualifications

Experienced researcher and a practitioner with 20 years of experience in the scientific study of users in commercial and military environments. Extensive skills in user interface design, data collection tools and methodologies including usability tests, questionnaires, interviews, focus groups, and expert evaluations. Supervised both human factors professionals and interns. Taught graduate and undergraduate human-computer interaction courses. Thesis committee member for human factors psychology graduate students. Recognized as specialist in accessible web site design. Co-authored *Constructing Accessible Web Sites*, and another chapter appeared in *The User-Centered Design Casebook*. Has presented widely on accessible website design, usability techniques, e-learning effectiveness, and health communication technology, which comprise her research programs. Serves as an alternate member of the U.S. Access Board 508/255 refresh committee, and a member of the UPA Voting and Usability Project.

## Education

**Ph.D., Human Factors Psychology** 1986

- Major Area: Human-computer interface design  
University of South Dakota, Vermillion, South Dakota

**M.A., Human Factors Psychology** 1984

University of South Dakota, Vermillion, South Dakota

**B.A., Psychology** 1982

Calvin College, Grand Rapids, Michigan

## Professional Experience

**Michigan State University** 2004-Present

### **Usability & Accessibility Center (UAC)**

Director

Responsible for developing and disseminating innovations in theory building, research methodologies, and technologies to enhance usability and accessibility in Web and information technology contexts. The UAC serves faculty, students, and organizations at MSU, as well as external clients through consulting, collaborative research educational programming, publications, and the sponsorship of open houses, workshops, and symposia.

### **University of Dayton**

#### **Research Institute & Department of Psychology**

Senior Human Factors Research Psychologist & 2002-2004  
Visiting Assistant Professor of Psychology

This joint appointment involved military and commercial usability and accessibility testing, managing research programs, and teaching graduate and undergraduate courses. Projects included:

- Performed commercial web accessibility evaluations for 19 LexisNexis products.
- Designed and conducted commercial and military product usability evaluations.

- Managed a web accessibility research program to examine strategies that sightless users utilize to perform web search and retrieval tasks using assistive technologies. Received an Ohio Board of Regents grant in May, 2003, to continue the research program.
- Received an internal research grant to study students' perceptions and experiences with e-learning environments.
- Conducted surveys and usability testing on handheld devices for military aircraft maintenance personnel.
- Taught graduate courses on human-computer interaction and engineering psychology, and an online undergraduate course in introductory psychology.
- Served as thesis committee advisor/member for four human factors students.

### **Independent Consultant**

2001–2002

- Co-authored a book on web accessibility, *Constructing Accessible Web Sites* (glasshaus, 2002, reprint edition, APress, July 14, 2003).
- Independent consultant for the TerraNova Group ([www.terranova.tv](http://www.terranova.tv)).
- Thesis advisor for University of Dayton masters student.
- Submitted contract proposals for implementing corporate accessibility compliance programs and enhancing web sites for disabled users.
- Professional presentations on accessible web design.

### **LexisNexis (formerly Mead Data Central), Miamisburg, OH**

Consulting Human Factors Engineer

1994–2002

Senior Human Factors Engineer

1992–1994

The LexisNexis services make up one of the world's largest full-text databases, providing online access to millions of legal, news, and business documents.

Promoted user-centered design concepts and methodologies for over 80 LexisNexis products.

- Organized and led the LexisNexis accessibility compliance initiative. Significant contribution to protect 40 to 50 million dollars in annual revenue from the federal government.
  - Evaluated and provided technical consulting on over 50 products.
  - Creating an organizational strategy for implementing Section 508 of the Rehabilitation Act for all of the flagship products.
  - Developed technical guidelines for applying the regulation.
  - Gave formal presentations to raise company-wide awareness of accessibility compliance issues.
  - Recognized as the company expert.
- Provided human factors leadership on several significant projects for business, academic, government, and law enforcement professionals.
  - Developed user interface designs, developed design concept prototypes, and implemented accessible web design standards.
  - Performed front-end task analyses, conducted concept tests, usability tests, and customer interviews, performed accessibility compliance evaluations, and administered customer feedback surveys.
  - Developed internal user interface design style guides for hypertext and graphical user interfaces.
  - Mentored other human factors engineers and interns.

**Logicon Technical Services, Inc.**, Dayton, OH 1989–1992  
**Systems Research Laboratories, Inc.**, Dayton, OH 1986–1989  
Senior Engineering Research Psychologist

Managed several research programs in the Design Effectiveness Technology (DEfTech) Laboratory programs within the Armstrong Laboratory (formerly the Aerospace Medical Research Laboratory) at Wright-Patterson AFB, OH.

Projects included:

- Human Factors lead on the design team that developed a commercially available multimedia design tool, called Computer Aided Systems Human Engineering (CASHE), for crew system designers. CASHE included human perception and performance data and a simulation capability. Designed the user interface for the interactive visual search test bench module.
- Surveyed crew system designers on their use of human factors engineering information in system design.
- Managed and conducted research on the Rapid Communication (RAPCOM (p)) Display Technology, which is based on the rapid sequential presentation of discrete frames of information via a single, spatially fixed display window. The objective of these studies was to determine the feasibility of implementing RAPCOM displays in real-world applications such as military crew stations, air traffic control centers, and anesthesiology workstations.
- Conducted research to evaluate the effect of different visual display designs (including RAPCOM displays) on spatial orientation/localization and situation awareness within the Visually Coupled Airborne Systems Simulator Laboratory at WPAFB.
- Consulted on the final publication drafts of the *Engineering Data Compendium: Human Perception and Performance* (Boff & Lincoln, 1988). Managed the creation of the Design Question Checklist for system designers. Contributed design questions for several topics.
- Participated in a think tank established to investigate the effects of computer conferencing and computer "associates" on collaborative problem solving.

**Wright State University**, Dayton, OH 1990–1992  
Adjunct Professor

Taught a graduate course on advanced topics in cognition and learning and an undergraduate introductory psychology course.

**IBM**, Boulder, CO 1985  
Human Factors Student Intern

Participated in the design and evaluation of several printers and copiers. Design issues included display types (touch screens), user instructions, machine status displays, and help manuals. Developed simulations to evaluate various printer/copier prototype user interfaces.

**Human Factors Laboratory, Univ. of South Dakota**, Vermillion, SD Research Associate 1982–1986

Conducted contract research on a variety of human-computer interaction issues such as alternative computer input device comparisons, cognitive modeling of human-machine systems, machine response time delays in embedded systems, and information management techniques. Responsibilities included experimental design, literature reviews, subject testing, data analysis, technical report writing, and supervision of undergraduate research assistants.

**Allied Tube & Conduit**, Harvey, IL 1981  
Marketing Research Intern

Conducted marketing research on sales potential for different segments of Allied's total market. Developed a sales inquiry system, organized information by potential market category, and conducted telephone interviews.

**Sociology Research Center**, Grand Rapids, MI 1980–1981  
Research Assistant

Conducted survey research for various administrative agencies within the college. Responsibilities included telephone interviews, data analysis, coding, and keypunching.

## Management experience

**Systems Research Laboratories, Inc.**, Dayton, OH 1986–1989  
**Logicon Technical Services, Inc.**, Dayton, OH 1989–1992  
Contract Focal Point

Focal point of the DEFtech Laboratory. Allocate financial resources, supervised computer scientists, engineers, and psychology associates/assistants, wrote personnel and equipment requisitions, and conducted hiring interviews with candidates for all positions within the Laboratory. Submitted monthly progress reports, and wrote/submitted contract task responses and proposal papers.

## Certification

Certified by the Board of Certification in Professional Ergonomics

## Clearance

Secret, May, 2002 – August, 2004  
Secret, December, 1986 – June, 1992

## Professional memberships

Sigma Xi, The Scientific Research Society  
Usability Professionals' Association  
Human Factors and Ergonomics Society  
    Test & Evaluation Association Newsletter Editor, 1991–1992  
Human Factors and Ergonomics Society, Southern Ohio Chapter  
    President, 2003  
    Treasurer, 1997, 2001  
    *Communiqué* Newsletter Editor, 1991–1993  
American Psychological Association, Division 21  
ACM's Special Interest Group on Computer-Human Interaction

## Grants

USDA/CSREES. *Role of Internet in Knowledge Transfer, Knowledge Management and Public Participation in Outdoor Recreation*. Grant # 2008-39478-19461. Principal Investigators: Propst, Dennis; Swierenga, Sarah J. Sept 2008 – Aug 2009, \$236K

Michigan Department of Community Health. *Background System Expansion and Transition*. Grant # 11-P-93042. Principal Investigator: Swierenga, Sarah J. Oct 2008 – Sep 2009, \$433K

USDA/CSREES. *Development of Analytical Tools and Knowledge Transfer in Corps of Engineers Recreation Program – Continuation No. Four*. Grant # 00319521. Principal Investigators: Propst, Dennis; Swierenga, Sarah J. Sept 2007 – Sep 2008, \$226K

Michigan Nutrition Network (U.S. Department of Agriculture). *Usability and Accessibility of Nutrition and Physical Activity Education Information for Blind and Low Vision Internet Users*. Grant # ADMIN-08-99009. Principal Investigators: Swierenga, Sarah J.; Coursaris, Constantinos K.; Whitten, Pam. Oct 2007 – Sep 2008, \$81K.

Michigan Department of Community Health (U.S. Health and Human Services). *Vulnerable Medicaid Populations: A Public Policy Assessment of Abuse Reduction*. Principal Investigators: Post, Lori A.; Swierenga, Sarah J.; Oehmke, James F.; Mastin, Theresa; Conner, Thomas L.; Page, Connie F.; Salmon, Charles T.; Parr, Cardona; Jose, Ruben; Schiamburg, Lawrence; Holmes, Denise L. Oct 2006 – Sep 2007, \$994K; Oct 2005 – Sep 2006, \$710K; May 2005 – Sep 2005, \$198K.

Michigan Department of Community Health (U.S. Health and Human Services). *Michigan Program for Background Checks for Employees with Direct Access to Individuals Who Require Long-Term Care*. Grant # 11-P-93042. Principal Investigators (MSU sub-contract): Post, Lori A.; Oehmke, James F.; Swierenga, Sarah J.; Luz, Claire C.; Mickus, Maureen A.; Salmon, Charles T. Jan 2005 – Dec 2007, \$4.1M.

## Patent

Ohio Board of Regents, Research Challenge Grant. Principal Investigators: Swierenga, S. J. and Militello, L. *Unpacking Mental Models of Website Navigation: Implications for Accessibility*. May 2003, \$30K.

Walker, J. L., Swierenga, S. J., Militello, L. G., and Gorman, M. E. U.S. Provisional Application Serial No. 60/615495 filed October 1, 2004 entitled, Task-Based User Interface Filter Method and Apparatus. Attorney Docket Number: UVD 0330 MA/40815.437.

## Publications

- Quesenbery, W., Becker, S. C., Redish, J., Swierenga, S. J., Chisnell, D., and Scott, J. (2008). *Verification: Rewriting the voting experience on Election Day*. Paper accepted for presentation at the Society for Technical Communication 2009 annual conference, Atlanta, GA.
- Elledge, M. S., Swierenga, S. J., Roberts, H. E., and Sung, J. E. (2008). *Pre/post user testing: Quantifying improvement and persistent issues in transportation website redesign*. Proposal for the Technology and Persons with Disabilities Conference. Los Angeles, CA: CSU Northridge.
- Swierenga, S. J., and Sung, J.E. (2008). *Outdoor recreation information website usability study with visually-impaired users*. Poster presentation at the World Usability Day / Sixth Annual Usability and Accessibility Conference. Michigan State University.
- Swierenga, S. J., Coursaris, C. K., Whitten, P., Pierce, G. L., and Roberts, H. E. (2008). *Usability and accessibility of nutrition information for blind and low vision Internet users*. Poster presentation at the World Usability Day / Sixth Annual Usability and Accessibility Conference. Michigan State University.
- Elledge, M. S., Swierenga, S. J., Roberts, H. E., and Sung, J. E. (2008). *Two-tiered usability testing: The before and after benefits for a public transportation website*. Poster presentation at the World Usability Day / Sixth Annual Usability and Accessibility Conference. Michigan State University.
- Swierenga, S. J. (2008). *Accessible Web Design – Do's and Don'ts*. Presentation at the U.S. Treasury IT Accessibility Conference. Washington, D.C.
- Swierenga, S. J., Elledge, M.S., Roberts, H. R., and Bachelder, C. (2008). *Benchmarking the Benefit of User Testing: Pre- and Post-Design Results for a Public Transportation Site*. Poster submitted for and presentation at the UPA 2009 conference, Portland, OR.
- McCarthy, J. E., and Swierenga, S. J. (2008, in press). What we know about dyslexia and accessibility: A research review. *Universal Access in the Information Society Journal*.
- Quesenbery, W., Paciello, M., and Swierenga, S. J. (2008). *Usability in Civic Life: Standards for usability, accessibility and plain language*. Poster at the UPA Europe 2008 Conference. Turin, Italy.
- Coursaris, C., Swierenga, S. J., and Watrall, E. (2008). An empirical investigation of color temperature and gender effects on Web aesthetics. *Journal of Usability Studies*, 3(3), 103-117.
- Swierenga, S. J. (2008). Mexican Government Signs Manifesto on Usability and Accessibility for Government Websites. *User Experience*, 7(1).
- Swierenga, S., Quesenbery, W., Walser, K., and Paciello, M. (2008). Usability in Civic Life Event: New recommendations for Section 508. In *Usability Professionals' Association 2008 Conference Proceedings*. Bloomington, IL: Usability Professionals' Association.
- Chisnell, D., Scott, J., Swierenga, S., and Quesenbery, W. (2008). Usability in Civic Life Event: The Local Election Officials Usability Testing Kit. In *Usability Professionals' Association 2008 Conference Proceedings*. Bloomington, IL: Usability Professionals' Association.

- Walser, K., Quesenbery, W., and Swierenga, S. (2008). Designing for cognitive disabilities. In *Usability Professionals' Association 2008 Conference Proceedings*. Bloomington, IL: Usability Professionals' Association.
- Swierenga, S. J., Porter, James, E., Ghosh, S., and McCarthy, J. E. (2008). Usable websites for dyslexic users: A voting website user study. In *Usability Professionals' Association 2008 Conference Proceedings*. Bloomington, IL: Usability Professionals' Association.
- Swierenga, S. J., Porter, James, E., Ghosh, S., and McCarthy, J. E. (2008). *Dyslexia and website design: The importance of user-based testing*. Presentation at the International Congress of Qualitative Inquiry (QI2008) Conference.
- Swierenga, S. J. (2008). *Accessibility overview – Websites and course materials*. Presentation at the 2008 MSU Faculty Seminars in Instructional Technology. Michigan State University.
- Papas, L., Jobst, J., and Swierenga, S. J. (2008). *Assessing accessibility of Web sites for users with disabilities*. Mini-workshop accepted for presentation at the Society for Technical Communication (STC) 2008 conference.
- Swierenga, S. J., and Elledge, M. S. (2008). *Making accessibility part of open source applications: Lessons learned from the Sakai, LON-CAP, and Fluid projects*. Presentation at the 2008 ATIA Leadership Forum on Accessibility. Orlando, FL.
- Elledge, M. S., and Swierenga, S. J. (2007). *Best practices in diversity: The UAC model*. Presentation at the 2007 MSU Best Practices Conference. Michigan State University.
- Post, L. A., Prokhorov, A., Salmon, C. T. Oehmke, J., and Swierenga, S. J. (2007). Aging and Elder Abuse: Projections for Michigan, *Population Research & Policy Review*. <http://www.springer.com/west/home/geography/demography?SGWID=4-40775-70-35679167-0>
- Quesenbery, W., and Swierenga, S. J. (2007). *Creating citizen-centered websites: Improving and testing the user experience*. Half-day workshop at the Citizen-Centered Government Web Sites: Usability, E-Democracy and Web. 2.0 Conference. Humphrey Institute, Minneapolis, MN.
- Swierenga, S. J. (2007). *Corporate Web accessibility implementation strategies*. Usability and Accessibility for the Web International Seminar. University of Monterrey, Nuevo Leon, Mexico.
- Swierenga, S. J. (2007). *Usability experts panel on information architecture, usability, and accessibility trends*. Panel presentation at the Usability and Accessibility for the Web International Seminar with Lou Rosenfeld, Javier Velasco, and Emilio Saldaña. University of Monterrey, Nuevo Leon, Mexico.
- Swierenga, S. J. (2007). Incorporating Web accessibility into the design process. In Righi, C., and James, J. (eds.), *The User-Centered Design Casebook*. Morgan Kaufmann.
- Swierenga, S. J., and Diehl, A. (2007). Usability evaluation of a transportation website with multiple user groups. In *Society for Technical Communication 54<sup>th</sup> Annual Conference Proceedings*. Technical Communication Summit conference.
- Swierenga, S. J., Choi, J. H., Post, L. A., and Coursaris, C. (2007). Public health communication technology: A case study in Michigan long-term care settings. *International Journal of Interdisciplinary Social Sciences*, 1(5), 115-124.

- Kiernan, T., and Swierenga, S. J. (2007). Podcasting about usability: Tips for practitioners. In *Usability Professionals' Association 2007 Conference Proceedings*. Bloomington, IL: Usability Professionals' Association.
- Coursaris, C., Swierenga, S. J., and Watrall, E. (2007). Effects of color temperature and gender on the website aesthetics. In *13<sup>th</sup> Americas Conference on Information Systems Proceedings*. Association for Information Systems.
- Coursaris, C., Swierenga, S. J., and Watrall, E. (2007). *Effects of color temperature and gender on the website aesthetics*. Paper presentation at the 13<sup>th</sup> Americas Conference on Information Systems (AMCIS) 2007 conference. Keystone, CO.
- Coursaris, C., Swierenga, S. J., and Watrall, E. (2007). Effects of color and gender on the perceived attractiveness of websites. In *Managing Worldwide Operations and Communications with Information Technology 2007 Conference Proceedings*. Information Resources Management Association (IRMA), USA.
- Swierenga, S. J., and Chisnell, D. E. (2007). The 2006 mid-term elections: Usability and accessibility voting forum. In *Technology and Persons with Disabilities Conference Proceedings*. Los Angeles, CA: CSU Northridge.
- Post, L. A., Swierenga, S. J., Oehmke, J., Salmon, C., Prokhorov, A., Meyer, E., and Joshi, V. (2006) The implications of an aging population structure. *International Journal of Interdisciplinary Social Sciences*, 1(2), 47-58.
- Swierenga, S. J., Post, L. A., and Connor, T.L. (2006, November). *Abuse baseline survey of Michigan adults in long-term care: Results*. Poster presented at the IHCS Fall Poster Session on Medicaid Match Projects.
- Swierenga, S. J., and Coursaris, C. (2006, November). *Abuse complaints handling process: Addendum study to vulnerable Medicaid populations: A public policy assessment of abuse reduction*. Poster presented at the IHCS Fall Poster Session on Medicaid Match Projects.
- Swierenga, S. J., Choi, J. H., Post, L. A., and Coursaris, C. (2006). *Public health communication technology: A case study in Michigan long-term care settings*. Paper presentation at the International Conference on Interdisciplinary Social Sciences 2006 conference, Island of Rhodes, Greece.
- Post, L. A., Prokhorov, A., Swierenga, S. J., Oehmke, J., Joshi, V., Salmon, C., and Meyer, E. (2006). *The implications of an aging population structure on abuse*. Paper presentation at the International Conference on Interdisciplinary Social Sciences 2006 conference, Island of Rhodes, Greece.
- Swierenga, S. J., Post, L. A., and Barbosa, G. (2005, November). *Abuse baseline survey of Michigan adults in long-term care*. Poster presented at the IHCS Fall Poster Session on Medicaid Match Projects.
- Post, L. A., Oehmke, J., Swierenga, S. J., Hogberg, M., Gia Barboza, G., and Korzeniewski, S. (2005, November). *Public policy implications of an aging population for the prevention of abuse, neglect, and exploitation*. Poster presented at the IHCS Fall Poster Session on Medicaid Match Projects.
- Swierenga, S. J., Diehl, A., Georgis, G., and Gilbert, P. (2006). Blind and sighted user experiences with a transportation authority website. In *Technology and Persons with Disabilities Conference Proceedings*. Los Angeles, CA: CSU Northridge.

- Swierenga, S. J. and Walker, J. L. (2005). *Implementing a corporate web accessibility compliance program*. Half-day tutorial at the Usability Professionals' Association conference. Bloomington, IL: Usability Professionals' Association.
- Oehmke, J., Post, L. Almerigi, J. and Swierenga, S. (2005). *Rural economic sustainability and background checks on workers in rural health care settings: Evidence from the Michigan pilot background check program*. Paper presentation at the American Agricultural Economics Association Annual Meeting, Providence, RI.
- Walker, J. L., Swierenga, S. J., Militello, L. G., and Gorman, M. G. (2005). *The task-based user interface filter accessibility tool for website navigation*. Paper presentation at CSUN's 20<sup>th</sup> Annual, International Conference, Los Angeles, CA, <http://www.csun.edu/cod/conf/2005/proceedings/2380.htm>.
- Swierenga, S. J., and Walker, J. L. (2004). *Corporate web accessibility implementation strategies*. Tutorial at the Second Annual Usability & Accessibility Conference. East Lansing, MI: MSU Usability and Accessibility Center.
- Swierenga, S. J., and Walker, J. L. (2001-2004). *Section 508 implementation guidelines for the Web*, [http://www.xeroday.com/resources/Section508\\_Implementation.pdf](http://www.xeroday.com/resources/Section508_Implementation.pdf).
- Swierenga, S. J. (2002, 2004). *Implementing a corporate web accessibility compliance program*. Half-day tutorial at the Usability Professionals' Association conference. Bloomington, IL: Usability Professionals' Association.
- Langhorne, A. and Swierenga, S. J. (2004). User expectations and perceptions of e-learning courses: Which course components facilitate e-learning satisfaction? In *Proceedings of the Human Factors and Ergonomics Society 48<sup>th</sup> Annual Meeting*. Santa Monica, CA: Human Factors & Ergonomics Society, 1069-1073.
- Gorman, M., Militello, L. G., Swierenga, S. J., and Walker, J. L. (2004). Internet searching by ear: Decision flow diagrams for sightless internet users. In *Proceedings of the Human Factors and Ergonomics Society 48<sup>th</sup> Annual Meeting*. Santa Monica, CA: Human Factors & Ergonomics Society, 243-247. Also presented as a poster session at the Michigan State University Fall Extension Conference, October 13, 2004.
- Walker, J. L., Anders, S. H., and Swierenga, S. J. (2004). Developing an effective Section 508 web accessibility compliance program. In *Proceedings of the Human Factors and Ergonomics Society 48<sup>th</sup> Annual Meeting*. Santa Monica, CA: Human Factors & Ergonomics Society, 1548-1551. Also presented as a poster session at the Michigan State University Fall Extension Conference, October 13, 2004.
- Swierenga, S. J., Militello, L. G., Gorman, M., and Walker, J. L. (2004). "Going in blind doesn't help": Cues for navigation. In *Usability Professionals' Association 2004 Conference Proceedings*. Bloomington, IL: Usability Professionals' Association.
- Langhorne, A. and Swierenga, S. (May, 2004). *Student perceptions of peer-to-peer and instructor-student communication in an e-learning environment*. Paper presented at the International Communication Association conference, New Orleans.
- Swierenga, S.J., Militello, L. G. and Gorman, M. E. (2004). *Unpacking mental models of website navigation: Implications for accessibility*. Ohio Board of Regents Report. Dayton, OH: University of Dayton Research Institute.
- Swierenga, S. J., Walker, J., Snead, A., Donahoo, C., and Quill, L. (2003, October). *Electronic flight and technical manual design guidelines*. (Report No. AFRL-HE-WP-TR-2003-0161). United States Air Force Research Laboratory, Human Effectiveness Directorate, Wright-Patterson AFB, Dayton, OH.

- Swierenga, S. J. and Guy, T. (2003). Session logistics for usability testing of users with disabilities. In *Usability Professionals' Association 2002 Conference Proceedings*. Bloomington, IL: Usability Professionals' Association.
- Swierenga, S. J. (2002). Separating content from presentation. In J. Thatcher, P. Bohman, M. Burks, S. L. Henry, B. Regan, S. Swierenga, M. D. Urban, and C. D. Waddell, *Constructing accessible web sites*. Birmingham, England: glasshaus. Reprint edition, APress, July 14, 2003.
- Swierenga, S. J. (2002). Web site design for the disabled: Issues for human factors practitioners. In *Proceedings of the Human Factors and Ergonomics Society 46<sup>th</sup> Annual Meeting*. Santa Monica, CA: Human Factors & Ergonomics Society, 209-213.
- Swierenga, S. J. (2002). Accessible web site design and usability testing. In *Usability Professionals' Association 2002 Conference Proceedings*. Bloomington, IL: Usability Professionals' Association.
- Swierenga, S. J. (2002). *Designing accessible web sites*. Presentation at the Human Factors & Ergonomics Society, Southern Ohio Chapter meeting.
- Swierenga, S. J. (2002). *Usability test report: Yahoo usability study with users who are sightless*. University of Dayton Research Institute, Aerospace Mechanics Division.
- Swierenga, S. J. (2001). *Section 508*. Panel presentation for the Dayton Electronic Commerce Forum.
- Swierenga, S. J., Monk, D. L., and Brown, C. E. (1992). Human performance data visualization for system design teams. In *Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON '92)*. New York, NY: IEEE Publishing Services, 675-680.
- Monk, D. L., Swierenga, S. J., and Lincoln, J. E. (1992). Developing behavioral phenomena test benches. In *Proceedings of the Human Factors Society 36th Annual Meeting*. Santa Monica, CA: Human Factors Society, 1106-1109.
- Vargo, C. G., Brown, C. E., and Swierenga, S. J. (1992). An evaluation of computer-supported backtracking in a hierarchical database. In *Proceedings of the Human Factors Society 36th Annual Meeting*. Santa Monica, CA: Human Factors Society, 356-360.
- Swierenga, S. J., Boff, K. R., and Donovan, R. S. (1991). Effectiveness of coding schemes in Rapid Communication displays. In *Proceedings of the Human Factors Society 35th Annual Meeting*. Santa Monica, CA: Human Factors Society, 1522-1526.
- Boff, K. R., Monk, D. L., Swierenga, S. J., Brown, C. E., and Cody, W. J. (1991). Computer-aided human factors for system designers. In *Proceedings of the Human Factors Society 35th Annual Meeting*. Santa Monica, CA: Human Factors Society, 322-336.
- Boff, K. R., Monk, D. L., Swierenga, S. J., Brown, C. E., and Cody, W. J. (1991). *Computer-aided systems engineering: A hypermedia tool*. Presentation and demonstration at the Human Factors Society 35th Annual Meeting, San Francisco, CA.

- Swierenga, S. J., Boff, K. R., and Donovan, R. S. (1991). Coding techniques for Rapid Communication displays. In *Proceedings of the Sixth International Symposium on Aviation Psychology*. Columbus, OH: The Ohio State University, Aviation Psychology Laboratory, 204-209.
- Brown, C. E., Boff, K. R., and Swierenga, S. J. (1991). Cockpit resource management: A social psychological perspective. In *Proceedings of the Sixth International Symposium on Aviation Psychology*. Columbus, OH: The Ohio State University, Aviation Psychology Laboratory, 398-403.
- Brown, C. E., Swierenga, S. J., and Wellens, A. R. (1991). Social psychological metaphors for human-computer system design. In *Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON '91)*. New York, NY: IEEE Publishing Services, 793-799.
- Swierenga, S. J., and Donovan, R. S. (1990). The effect of Rapid Communication display technology on task performance. In *Proceedings of the 5th Mid-Central Ergonomics/Human Factors Conference*. Dayton, OH: University of Dayton Research Institute.
- Swierenga, S. J. (1990). A comparison of mouse, trackball, and joystick performance using text-editing and tracking tasks. In *Proceedings of the 5th Mid-Central Ergonomics/Human Factors Conference*. Dayton, OH: University of Dayton Research Institute.
- Swierenga, S. J., Morton, K., and Boff, K. R. (1990). Issues concerning the use of human engineering information: The system designer's perspective. In *Proceedings of the National Aerospace and Electronics Conference (NAECON '90)*. New York, NY: IEEE Publishing Services, 881-885.
- Morton, K., and Swierenga, S. J. (1990). Developing effective coding schemes for an advanced display technology. In *Proceedings of the 12th Symposium on Psychology in the Department of Defense*. Colorado Springs, CO: US Air Force Academy, 328-332.
- Swierenga, S. J. (1990). Menuing and scrolling as alternative information access techniques. In *Proceedings of the Human Factors Society 34th Annual Meeting*. Santa Monica, CA: Human Factors Society, 356-359.
- Swierenga, S. J., Boff, K. R., and Morton, K. (1990). *An engineering perspective on the usefulness and usability of human engineering information in system design*. Poster presented at the Human Factors Society 34th Annual Meeting, Orlando, FL.
- Brown, C. E., Swierenga, S. J., and Wellens, A. R. (1990). *Human-computer "friendship": A metaphor for intelligent system design*. Poster presented at the Human Factors Society 34th Annual Meeting, Orlando, FL.
- Swierenga-Osgood, S., Boff, K. R., and Donovan, R. S. (1988). Rapid Communication Display Technology in a multi-task environment. In *Proceedings of the Human Factors Society 32th Annual Meeting*. Santa Monica, CA: Human Factors Society, 1395-1399.
- Swierenga-Osgood, S. (1986). *Menuing and scrolling as alternative information management techniques*. Final Report for the C2 Operator Console Study (Subcontract N66001-85-C-0253 with Naval Ocean Systems Center). Vermillion, SD: University of South Dakota, Human Factors Laboratory (TR-86-0701).

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