

# MARY CZERWINSKI

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## RESEARCH INTERESTS

Human-Computer Interaction, Visual Attention, Task Switching, User Interface Design, Information Visualization, Groupware, Ubiquitous Computing, Spatial Cognition, Novel Interaction Techniques

## EDUCATION

**Indiana University** 1983 - 1988  
Bloomington, Indiana  
Ph.D. in Cognitive Psychology, Minor in Statistics. Thesis title: *Differences between memory and visual search: Implications for models of attention.*

**Ball State University** 1978-1981  
Muncie, Indiana  
M.A. in Experimental Psychology; B.A. in Psychology, Minor in French, Honors College graduate, summa cum laude.

## PROFESSIONAL EMPLOYMENT RECORD

**Microsoft Research** (1997-present)  
Redmond, Washington  
RESEARCH AREA MANAGER, VISUALIZATION AND INTERACTION RESEARCH GROUP. Manage researchers, designers and developers doing human-computer interaction research around large/multiple displays, social and physiological computing, novel information visualizations and interaction techniques.

**Microsoft Corporation** (1995-1997)  
Redmond, Washington  
MANAGER, INTERACTIVE MEDIA DIVISION USABILITY. Responsible for orchestrating all human-computer interaction research for interactive media, hardware and desktop finance division product teams. Other duties include communicating benefits of usability engineering to management, hiring and maintaining a world-class staff, and aligning with academic and industry partners in research relationships. Personal research projects centered on attention and engagement and how they are related to world wide web user interface design and usage.

**University of Washington Psychology Department** (1996-2009)  
Seattle, Washington  
AFFILIATE ASSISTANT PROFESSOR OF PSYCHOLOGY. Actively involved in departmental research through professor/student contracts and internships. guest lecturer on usability engineering.

**Compaq Computer Corporation** (1990-1995)  
Houston, Texas  
RESEARCH LEAD, SOFTWARE HUMAN FACTORS DESIGN AND TEST. Managed and contributed to all software user interface design and evaluation research. Conducted cognitive and task analysis modeling

procedures to benefit user interface design. Worked on user interfaces to speech-driven voicemail applications, systems management products and consumer software applications, both in-house and with third parties.

**Rice University, Department of Psychology (1990-1995)**

Houston, Texas

ADJUNCT PROFESSOR OF PSYCHOLOGY. Instructed graduate course in information processing and attention with an applied emphasis; mentored human factors students.

**Lockheed Engineering and Sciences Corporation (1989-1990)**

Houston, Texas

APPLIED RESEARCH LEAD, HUMAN-COMPUTER INTERACTION LABORATORY. Directed all applied human-computer interaction research in the human-computer interaction laboratory at Johnson Space Center, as well as conducted own avenues of research for user interfaces to intelligent systems and multitasking environments. Published and reviewed technical articles, wrote grant proposals and prepared project schedules.

**Bell Communications Research (1988-1989)**

Piscataway, New Jersey

MEMBER OF TECHNICAL STAFF, HUMAN FACTORS ENGINEER. Designed graphical user interface and wrote technical requirements for a packet-switched planning network. Aided in the preparation and dissemination of corporate user interface design guidelines.

**AWARDS:**

- ACM Distinguished Scientist 2010
- ACM SIGCHI CHI Academy 2010
- ACM SIGCHI Lifetime Service Award 2010

**PROFESSIONAL SERVICE:**

- UIST 2010 Technical Program Co-Chair
- IHCS Advisory Board 2010
- ACM SIGCHI Executive Vice-President.2006-2009
- Creativity & Cognition 2009 Doctoral Consortium
- Interact 2009 Program Committee
- CHI 2008 Conference Co-Chair
- Georgia Tech GVU Center Advisory Board
- International Journal of Human-Computer Interaction Editorial Board since 2007
- Creativity and Cognition Doctoral Consortium Co-Chair, 2007
- ACM SIGCHI Executive Vice-President.2003-2006
- ACM SIGCHI Communications Vice-President 2001-2002
- Interact 2007 Doctoral Consortium Co-Chair
- UIST 2005 Conference Co-Chair
- Interact 2005 Tutorials Co-Chair

- UIST 2004 Program Committee
- Dean's Advisory Board for the Indiana University School of Informatics since 2004
- Co-Editor for IJHCS Special Issue on Notifications Design and Evaluation.
- AVI 2004 Program Committee.
- UIST 2003 Doctoral Consortium Co-Chair.
- Information Visualization editorial board member since 2003.
- CHI 2003 and 2004 Associate Chair.
- CHI 2002 Workshop Co-Chair.
- Co-Editor for a Special Issue of IJHCS on Empirical Studies of Information Visualizations.
- CHI 2000 Papers Co-chair.
- Co-Editor for a Special Issue of JASIS on Individual Differences in Virtual Environments.
- Co-Editor for a Special Issue of VR on Human Factors in Virtual Reality.
- CHI'98 Design Briefings Co-chair.
- HFES CSTG Secretary/Treasurer 1995-1997.
- University of Washington Psychology Department affiliate faculty member 1996-current.

## **PUBLICATION SUMMARY:**

### **Papers in Refereed Journals**

1. Bederson, B. B., Clamage, A., Czerwinski, M. P., & Robertson, G. G. (2004). DateLens: A Fisheye Calendar Interface for PDAs, *Transactions on Computer-Human Interaction, March, 11(1)*, New York: ACM, 90-119.
2. Bernstein, M.S., Tan, D., Smith, G., Czerwinski, M. and Horvitz, E. (2010). Personalization via friendsourcing. In *ACM Transactions on Computer-Human Interaction (TOCHI)*, Volume 17 (2), 1-28.
3. Chen, C., & Czerwinski, M. (2000). Empirical Evaluation of Information Visualisations: An Introduction. In *International Journal of Human-Computer Studies, 53(5)*, 631-635.
4. Chen, C., Czerwinski, M. & Macredie, R. (2000). Individual differences in virtual environments--Introduction and Overview. In *Journal of the American Society for Information Science, 51(6)*, 499-507.
5. Chen, C. & Czerwinski, M. (1998). Spatial Ability and Visual Navigation: An Empirical Study. In *The New Review for Hypertext and Multimedia, Volume 3*, pp. 40-66.
6. Czerwinski, M.P., Lightfoot, N. & Shiffrin, R.M. (1992). Automatization and training in visual search. *American Journal of Psychology, Special issue on Views and Varieties of Automaticity, 105*, 271-315.
7. Hines, D., Czerwinski, M., Sawyer, P.K., & Dwyer, M. (1986). Automatic semantic priming: Effect of category exemplar level and word association level. *Journal of Experimental Psychology: Human Perception and Performance, 12*, 1-10.

8. Hines, D., Sawyer, P.K., Dura, J., Gilchrist, J., and Czerwinski, M.P. (1984). Hemispheric asymmetry in the use of semantic category information. *Neuropsychologia*, 22, 427-433.
9. Lee, B., Robertson, G., Czerwinski, M., and Parr, C.S. (2007) CandidTree: Visualizing Structural Uncertainty in Similar Hierarchies, *Information Visualization*, Vol. 6, pp. 233-246.
10. McCrickard, D. S., Czerwinski, M. & Bartram, L. (2003). Introduction: design and evaluation of notification user interfaces. In *International Journal of Human-Computer Studies*, 58, 509-514.
11. Muller, M. & Czerwinski, M. Organizing usability work to fit the full product range. In *Communications of the ACM*, 42(5), 87-90.
12. Risden, K., Czerwinski, M., Munzner, T. & Cook, D. (2000). An Initial Examination of Ease of Use for 2D and 3D Information Visualizations of Web Content. In *International Journal of Human-Computer Studies: Special Issue on Empirical Evaluations of Information Visualizations*, 53(5), 695-714.
13. Robertson, G.G., Cameron, K., Czerwinski, M. & Robbins, D. (2002). Polyarchy Visualization: Visualizing multiple intersecting hierarchies. *Information Visualization*, 1(1), p.50-65.
14. Shiffrin, R.M. & Czerwinski, M.P. (1988). A model of automatic attention attraction when mapping is partially consistent. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 14, 562-569.
15. Tan, D., Czerwinski, M., Robertson, G. G. (2006). Large displays enhance optical flow cues and close the gender gap in 3D virtual navigation. *Human Factors*.

### Conference Papers

1. Fisher, D., Isenberg, P., Morris, M. R., Inkpen, K. and Czerwinski, M. (2010). An exploratory study of co-located collaborative visual analytics around a tabletop display. In *Proceedings of IEEE VAST 2010*, October 2010.
2. Seuken, S., Jain, K., Tan, D. and Czerwinski, D. (2010) Hidden markets: UI design for a P2P backup application. *ACM's CHI '10 Proceedings*, 315-324.
3. Inkpen, K., Hegde, R., Czerwinski, M. and Zhang, Z. (2010) Exploring spatialized audio and video for distributed conversations. In *Proceedings ACM's CSCW '10*, 95-98.
4. Jain, K., Song, Y., He, L. and Czerwinski, M. (2010). Evaluating the unaccounted cost of distraction of display ads to the users, in *Proceedings of the ACM's Web Science Conference 2010 (WebSci '10)*.
5. Czerwinski, M., Gage, D., Gemmel, J., Marshall, C. C., Perez-Quinones, M., Skeels, M. M., et al. (2006). Digital memories in an era of ubiquitous computing and abundant storage. *Communications of the ACM, Special Issue on Personal Information Management*, 49(1), 44-50.
6. Burnett, M., Fleming, S.D., Iqbal, S., Venolia, G., Rajaram, V., Farooq, U., Grigoreanu, V. & Czerwinski, M. (2010). Gender differences and programming environments: across programming populations. In *Proceedings of the ESEM '10*.
7. Bernstein, M., Tan, D., Smith, G., Czerwinski, M. and Horvitz, E. (2009). Collabio: a game for annotating people within social networks. In *Proceedings of ACM's UIST 2009*, 97-100.
8. Jakobsen, M.R., Fernandez, R., Czerwinski, M., Inkpen, K., Kulyk, O. and Robertson, G.G. (2009). WIPDash: Work item and people dashboard for software development teams, in *12<sup>th</sup> IFIP TC13 Conference in Human-Computer Interaction*, (Interact 2009), Springer Verlag.

9. Eurico de Vasconcelos Filho, J., Inkpen, K., and Czerwinski, M. (2009). Image, appearance and vanity in the use of media spaces and video conference systems. In *Proceedings of ACM's GROUP '09*, 253-261.
10. Lee, B., Smith, G., Robertson, G. G., Czerwinski, M., and Tan, D. (2009). FacetLens: Exposing trends and relationships to support sensemaking within faceted datasets. In *Proceedings of AMC's CHI 2009*, 1293-1302.
11. Fisher, D., Maltz, D., Greenberg, A., Wang, X., Warncke, H., Robertson, G.G. and Czerwinski, M. (2008). Using visualization to support network and application management in a data center. In *Proceedings of Internet Network Management Workshop at ICNP*.
12. Inkpen, K., Whittaker, S., Czerwinski, M., Wallace, J. and Fernandez, R. (2008). GroupBanter: Supporting serendipitous group conversations with IM. In *Proceedings of the 4<sup>th</sup> International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom 2008)*.
13. Gajos, K., Everitt, K., Tan, D., Czerwinski, M. and Weld, D. (2008). Predictability and accuracy in adaptive user interfaces. In *Extended Abstracts of CHI 2008 Conference on Human Factors in Computing Systems*.
14. Jacob Biehl, William Baker, Brain Bailey, Desney S Tan, Kori Inkpen, Mary Czerwinski (2008). IMPROMPTU: A New Interaction Framework for Supporting Collaboration in Multiple Display Environments and its Field Evaluation for CO-located Software Development. In *Proceedings of CHI 2008 Conference on Human Factors in Computing Systems*, pp. 939-948.
15. Oliver, N., Czerwinski, M., Smith, G. and Roomp, K. (2008). RelAltTab: Assisting users n switching windows. In *Proceedings of the ACM's IUI '08*, 385-388.
16. Sherwani, J., Yu, D., Paek, T., Czerwinski, M. and Acero, A. (2007). Towards speech-based access to unstructured information. In *Proc. Of the 2007 Interspeech Conference, International Speech Communication Association*.
17. Brush, A.J., Meyers, B.R., Tan, D. S. and Czerwinski, M. (2007). Understanding memory triggers for task tracking. In *Proceedings of the ACM's CHI '07*, 947-950.
18. Biehl, J. T., Czerwinski, M., Smith, G. and Robertson, G.G. (2007). FASTDash: A visual dashboard for fostering awareness in software teams. In *Proceedings of ACM's CHI '07*, 1313-1322.
19. Desney S Tan, Darren Gergle, Regan Mandryk, Kori Inkpen, Melanie Kellar, Kirstie Hawkey, Mary Czerwinski (2007). Using Job-Shop Scheduling Tasks for Evaluating Collocated Communication. In *Journal of Personal and Ubiquitous Computing (Special Issue on User-Centered Design and Evaluation of Services for Human-Human Communication and Collaboration)*, p. 1-13.
20. G Smith, M Czerwinski, B Meyers, D Robbins, G Robertson, D S Tan. (2006). FacetMap: A Scalable Search and Browse Visualization, In *Proceedings of InfoVis 2006*.
21. DeLine, R., Czerwinski, M., Meyers, B., Venolia, G., Drucker, S. & Robertson, G. (2006). Code thumbnails: Using spatial memory to navigate source code. In *Proceedings of Visual Languages/Human-Centered Computing (VL/HCC) 2006*, Brighton, England.
22. Krzysztof Z. Gajos, Mary Czerwinski, Desney S. Tan and Daniel S. Weld . (2006). Exploring the Design Space For Adaptive Graphical User Interfaces. In *Proceedings of AVI'06*, Venice, Italy, 2006, 201-208.
23. Ramos, G., Robertson, G., Czerwinski, M., Tan, D., Baudisch, P., Hinckley, K., Agrawala, M., Robbins, D. Tumble! Splat! Helping users access and manipulate occluded content in 2D drawings. In *Proceedings of AVI'06*, Venice, Italy, 2006, 428-435.
24. Czerwinski, M., Robertson, G.G., Meyers, B., Smith, G., Robbins, D. & Tan, D. (2006). Large display research overview. In *Proceedings of ACM's CHI 2006*, 69-74.
25. Matthews, T., Czerwinski, M., Robertson, G. & Tan, D. (2006). Clipping lists and change borders: Improving multitasking efficiency with peripheral information design. In *Proceedings of ACM's CHI 2006*. 989-998.

26. Karlson, A.K., Robertson, G., Robbins, D., Czerwinski, M. & Smith, G. (2006). FaThumb: A facet-based interface for mobile search. In *Proceedings of ACM's CHI 2006*, 711-720.
27. Meyers, B., Brush, A.J., Drucker, S., Smith, M. & Czerwinski, M. (2006). Dance your work away: Exploring step user interfaces. In *Proceedings of ACM's CHI 2006*, 387-392.
28. Tan, D., Keyani, P. & Czerwinski, M. (2005). Spy-resistant keyboard: More secure password entry on public touch screen displays. In *Proceedings of OZCHI 2005*.
29. Deline, R., Czerwinski, M. & Robertson, G.G. (2005). Easing Program Comprehension by Sharing Navigation Data. In *Proceedings of Visual Languages and Human-Centered Computing, VL/HCC 2005*.
30. Robertson, G.G., Czerwinski, M., Baudisch, P., Meyers, B., Robbins, D., Smith, G., and Tan, D. (2005). Large display user experience. In *IEEE CG&A special issue on large displays*, 25(4), 44-51.
31. Chellapilla, K., Larson, K., Simard, P. & Czerwinski, M. (2005). Computers beat humans at single character recognition in reading-based Human Interaction Proofs (HIPs). In *Proceedings of CEAS 2005*, Conference on Email and Anti-Spam.
32. Robertson, G.G., Czerwinski, M.P. & Churchill, J.E. (2005). Visualization of Mappings between Schemas. In *Proceedings of ACM's CHI 2005* (full paper).
33. Chellapilla, K., Larson, K., Simard, P. & Czerwinski, M. (2005). Designing Human Friendly Human Interaction Proofs (HIPs). In *Proceedings of ACM's CHI 2005* (full paper).
34. Lee, B., Czerwinski, M., Robertson, G. & Bederson, B. B. (2005). Understanding Research Trends in Conferences using PaperLens. In *Proceedings of ACM's CHI 2005* (short paper).
35. Deline, R., Khella, A., Czerwinski, M. and Robertson, G.G. (2005). Towards understanding programs through wear-based filtering. In *Proceedings of SoftVis 2005*.
36. Lee, B., Czerwinski, M., Robertson, G.G. & Bederson, B. (2004). Understanding 8 years of InfoVis conferences using PaperLens. In *Proceedings of InfoVis 2004*.
37. Czerwinski, M., Horvitz, E. & Wilhite, S. (2004). A Diary Study of Task Switching and Interruptions. In *Proceedings of ACM Human Factors in Computing Systems CHI 2004*, p. 175-182.
38. Tan, D.S., Meyers, B. & Czerwinski, M. (2004). WinCuts: Manipulating arbitrary window regions for more effective use of screen space. In *Extended Abstracts of Proceedings of ACM Human Factors in Computing Systems CHI 2004*, p. 1525-1528.
39. Hutchings, D., Smith, G., Meyers, B., Czerwinski, M., & Robertson, G. (2004). Display space usage and window management operation comparisons between single monitor and multiple monitor users. In *Proceedings of the working conference on Advanced Visual Interfaces, AVI 2004*, p. 32-39.
40. Robertson, G., Horvitz, E., Czerwinski, M., Hutchings, D., Baudisch, P, Meyers, B., Robbins, D & Smith, G. Scalable Fabric: Flexible task management. In *Proceedings of the working conference on Advanced Visual Interfaces, AVI 2004*, p. 85-89.
41. G. Smith, P. Baudisch, G. Robertson, M. Czerwinski, B. Meyers, D. Robbins, and D. Andrews, "GroupBar: The TaskBar Evolved", in *Proceedings of OZCHI'03* (Australian Computer Human Interaction Conference), November 26, 2003, Brisbane, Australia, Univ. of Queensland, pp. 34-43.
42. D. Tan and M. Czerwinski, "Effects of Visual Separation and Physical Discontinuities when Distributing Information across Multiple Displays", in *Proceedings of OZCHI'03* (Australian Computer Human Interaction Conference), November 26, 2003, Brisbane, Australia, Univ. of Queensland, pp. 184-191.

43. Czerwinski, M., Smith, G., Regan, T., Meyers, B., Robertson, G. and Starkweather, G. (2003). Toward characterizing the productivity benefits of very large displays. In M. Rauterberg et al. (Eds.), *Human-Computer Interaction--INTERACT '03*, IOS Press, 9-16.
44. Tan, D. and Czerwinski, M. (2003). Effects of Visual Separation and Physical Discontinuities when Distributing Information across Multiple Displays. In M. Rauterberg et al. (Eds.), *Human-Computer Interaction--INTERACT '03*, IOS Press, 252-255.
45. Baudisch, P., Cutrell, E., Robbins, D., Czerwinski, M., Tandler, P., & Bederson, B. B. and Zierlinger, A. (2003) Drag-and-Pop and Drag-and-Pick: Techniques for Accessing Remote Screen Content on Touch- and Pen-Operated Systems. In M. Rauterberg et al. (Eds.), *Human-Computer Interaction--INTERACT '03*, IOS Press, 57-64.
46. McCrickard, D. S., Czerwinski, M. & Bartram, L. (2003). Introduction: design and evaluation of notification user interfaces. In *International Journal of Human-Computer Studies*, 58, 509-514.
47. Bederson, B.B., Czerwinski, M. & Robertson, G. (2003). A fisheye calendar interface for PDAs: Providing overviews for small displays. In Bederson, B.B. & Shneiderman, B. (Eds.) *The Craft of Information Visualization: Readings and Reflections*, 324-344, San Francisco: Morgan Kaufman, Inc.
48. Bederson, B.B., Czerwinski, M. & Robertson, G. (2003). A fisheye calendar interface for PDAs: Providing overviews for small displays. In *Companion Proceedings of CHI 2003, Human Factors in Computing Systems*, pp. 1066-1067, ACM press.
49. Tan, D.S., Czerwinski, M., & Robertson, G.G. (2003). Women Go with the (Optical) Flow. In *Proceedings of CHI 2003, Human Factors in Computing Systems*, pp. 209-215, ACM press.
50. Tan, D. and Czerwinski, M. (2003). Information Voyeurism: Social Impact of Physically Large Displays on Information Privacy. In *Proceedings of CHI 2003, Fort Lauderdale, Florida, April 2003*, pp. 748-749, ACM press.
51. Czerwinski, M. (2002). Humans in HCI. Chapter in Jacko, J. & Sears, A. (Eds.) *Handbook of HCI*, pp. 19-21, Erlbaum: NJ.
52. Czerwinski, M. & Larson, K. (2002). Cognition and the Web: Moving from theory to design. Chapter in Ratner, J. (Ed.), *Human Factors and Web Development*, pp. 147-165, Erlbaum: NJ.
53. Czerwinski, M. & Horvitz, E. (2002). Memory for Daily Computing Events. Czerwinski, M. & Horvitz, E. (2002). Memory for Daily Computing Events. In Faulkner, X., Finlay, J. & Detienne, F. (Eds.), *People and Computers XVI, Proceedings of HCI 2002*, 230-245.
54. Van Dantzich, M., Robbins, D., Horvitz, E. & Czerwinski, M. (2002). Scope: Providing awareness of multiple notifications at a glance. In *Proceedings of Advanced Visual Interfaces 2002*, Trento, Italy, 157-166.
55. Czerwinski, M., Tan, D.S. & Robertson, G.G. (2002). Women take a wider view. In *Proceedings of CHI 2002, Human Factors in Computing Systems*, pp. 195-202, ACM press.
56. Robertson, G.G., Cameron, K. Czerwinski, M. & Robbins, D. (2002). Polyarchy Visualization: Visualizing multiple intersecting hierarchies. In *Proceedings of CHI 2002, Human Factors in Computing Systems*, pp. 423-430, ACM press.
57. Czerwinski, M., Horvitz, E. & Cutrell, E. (2001). Subjective Duration Assessment: An Implicit Probe for Software Usability. In *Proceedings of IHM-HCI 2001 Conference, Volume 2, (September, 2001, Lille, France)*, p. 167-170.
58. S. T. Dumais and M. P. Czerwinski (2001). Building bridges from theory to practice. In *HCI International 2001, 9th Conference on Human-Computer Interaction*. Session on Contributions of Basic Research in Psychology to Human Factors and Human-Computer Interaction. August 2001.

59. Tan, D.S., Robertson, G.G. & Czerwinski, M. (2001). Exploring 3D Navigation: Combining Speed-Coupled Flying with Orbiting. In *Proceedings of CHI 2001, Human Factors in Computing Systems*, (Seattle, WA April 1-6, 2001), pp. 418-424, ACM press.
60. Tiernan, S.L., Cutrell, E., & Czerwinski, M. (2001). Effective Notification Systems Depend on User Trust, In *Human-Computer Interaction--Interact '01*, Hirose, M. (Ed.), IOS Press, pp.684-685.
61. Cutrell, E., Czerwinski, M. & Horvitz, E. (2001). Notification, Disruption and Memory: Effects of Messaging Interruptions on Memory and Performance. In *Human-Computer Interaction--Interact '01*, Hirose, M. (Ed.), IOS Press, pp.263-269.
62. Wenyin, L., Dumais, S., Sun, Y., Zhang, H., Czerwinski, M. & Field, B. (2001). Semi-Automatic Image Annotation. In *Human-Computer Interaction--Interact '01*, Hirose, M. (Ed.), IOS Press, pp.326-333.
63. Czerwinski, M., Cutrell, E. & Horvitz, E. (2000). Instant Messaging and Interruption: Influence of Task Type on Performance, In *Paris, C., Ozkan, N., Howard, S. and Lu, S. (Ed's.), OZCHI 2000 Conference Proceedings*, Sydney, Australia, Dec. 4-8, pp. 356-361.
64. Czerwinski, M., Cutrell, E. & Horvitz, E. (2000). Instant Messaging: Effects of Relevance and Time, In S. Turner, P. Turner (Eds), *People and Computers XIV: Proceedings of HCI 2000, Vol. 2*, British Computer Society, p. 71-76.
65. Ridsen, K., Czerwinski, M., Munzner, T. & Cook, D. (2000). An Initial Examination of Ease of Use for 2D and 3D Information Visualizations of Web Content. In *International Journal of Human-Computer Studies: Special Issue on Empirical Evaluations of Information Visualizations*, 53(5), 695-714.
66. Chen, C., & Czerwinski, M. (2000). Empirical Evaluation of Information Visualisations: An Introduction. In *International Journal of Human-Computer Studies*, 53(5), 631-635.
67. Chen, C., Czerwinski, M. & Macredie, R. (2000). Individual differences in virtual environments--Introduction and Overview. In *Journal of the American Society for Information Science*, 51(6), 499-507
68. Robertson, G.G. et al. (2000). The Task Gallery: A 3D Windows Manager. In *Proceedings of CHI '2000, Human Factors in Computing Systems*, (The Hague, April 1-6, 2000), pp. 494-501, ACM press.
69. Larson, K., van Dantzich, M., Czerwinski, M. & Robertson, G. (2000). Text in 3D: Some Legibility Results. In *Extended Abstracts of CHI '2000, Human Factors in Computing Systems*, (The Hague, April 1-6, 2000), ACM press, 145-146.
70. Cutrell, E., Czerwinski, M. & Horvitz, E. (2000). Effects of Instant Messaging Interruptions on Computing Tasks. In *Extended Abstracts of CHI '2000, Human Factors in Computing Systems*, (The Hague, April 1-6, 2000), ACM press, 99-100.
71. Czerwinski, M. (1999). Research Methods for Next Generation HCI. In *Proceedings of Human-Computer Interaction International, 1999*, Munich, August 21-27.
72. Czerwinski, M. (1999). Trends in Future Web Designs. In *Proceedings of Human-Computer Interaction International, 1999*, Munich, August 21-27.
73. Czerwinski, M., van Dantzich, M., Robertson, G.G. & Hoffman, H. (1999). The contribution of thumbnail image, mouse-over text and spatial location memory to web page retrieval in 3D. In Sasse, A. & Johnson, C. (Eds), *Human-Computer Interaction--Proceedings of Interact '99, Edinburgh*, Scotland, IOS press, pp. 163-170.
74. Muller, M.J. & Czerwinski, M. (1999). Organizing usability work to fit the full product range. In *Association for Computing Machinery's (ACM) Communications of the ACM*, May, 42 (5), pp.87-90.

75. Czerwinski, M. & Larson, K. (1999). Web design: What's next for the HCI professional? *Association for Computing Machinery's (ACM) Interactions*, March-April, v. V1-2.
76. Visualizing Implicit Queries for Information Management and Retrieval, Czerwinski, M., Dumais, S.T., Robertson, G.G., Dziadosz, S., Tiernan, S. and van Dantzich, M. In *Proceedings of CHI '99, Human Factors in Computing Systems*, (Pittsburgh, May 17-20, 1999), ACM press, 560-577.
77. Shafer, S., Krumm, J., Brumitt, B., Meyers, B., Czerwinski, M. & Robbins, D. The New EasyLiving Project at Microsoft Research, *Joint DARPA/NIST Smart Spaces Workshop*, July 30-31, 1998, Gaithersburg, Maryland.
78. Robertson, G., Czerwinski, M., Larson, K., Robbins, D., Thiel, D. & van Dantzich, M. (1998) Data Mountain: Using Spatial Memory for Document Management. In *Proceedings of UIST '98, 11th Annual Symposium on User Interface Software and Technology*, pp. 153-162.
79. Czerwinski, M., Larson, K., & Robbins, D. (1998). Designing for Navigating Personal Web Information: Retrieval Cues. In *Proceedings of the Human Factors and Ergonomic Society's 42nd Annual Meeting*, 458-462.
80. Chen, C. & Czerwinski, M. (1998). From Latent Semantics to Spatial Hypertext--An Integrated Approach, In *Hypertext '98, The Proceedings of the 9th ACM Conference on Hypertext and Hypermedia*, pp. 77-86.
81. Larson, K. & Czerwinski, M. (1998). Web Page Design: Implications of Memory, Structure and Scent for Information Retrieval, In *Proceedings of CHI '98, Human Factors in Computing Systems* (LA, April 21-23, 1998), ACM press, 25-32.
82. Hinckley, K., Czerwinski, M. & Sinclair, M. (1998). Interaction and Modeling Techniques for Desktop Two-Handed Input More than a Mouse. In *Proceedings of the ACM Symposium on User Interface Software and Technology*, 1998 p.49-58.
83. Ridsen, K., Czerwinski, M.P., Worley, S., Hamilton, L., Kubiniec, J., Hoffman, H., Mickel, N., & Loftus, E. (1998). Interactive advertising: Patterns of use and effectiveness, In *Proceedings of CHI '98, Human Factors in Computing Systems* (LA, April 21-23, 1998), ACM press, 219-224.
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2. Hanna, L., Ridsen, K., Czerwinski, M. and Alexander, K. (1998). The role of usability research in designing children's products, Chapter in A. Druin's (Ed.) The Design of Children's Technology, 1998, Morgan Kaufman.
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  4. Kaptelinin, V. & Czerwinski, M. (Eds.), (2007). Beyond the Desktop Metaphor: Integrated Digital Work Environments. MIT Press.
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  7. Robertson, G., Czerwinski, M., Fisher, D. and Lee, B. (2009). Selected Human Factors in Information Visualization. In Durso, F. (Ed.), *Reviews of Human Factors and Ergonomics, Volume 5*.
  8. Robertson, G., Smith, G., Baudisch, P., Czerwinski, M., Horvitz, E., Meyers, B., Robbins, D. and Tan, D. S. (2007). *New Frontiers in Desktop Management*. In *Beyond the Desktop Metaphor: Designing Integrated Digital Work Environments* (Eds. Victor Kaptelinin and Mary Czerwinski).
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  10. Schumacher, R.M. & Czerwinski, M.P. (1991) Mental Models and the acquisition of expert knowledge. Chapter in R.R. Hoffman (Ed.), The Psychology of Expertise: Empirical Approaches to AI, New York: Springer-Verlag.
  11. Desney S Tan, Mary Czerwinski, Gordon Bell, Emma Berry, Jim Gemmell, Steve Hodges, Narinder Kapur, Brian Meyers, Nuria Oliver, George Robertson, Ken Wood (2007). Supporting Human Memory with a Personal Digital Lifetime Store. In *Personal Information Management: Challenges and Opportunities* (eds. William Jones and Jaime Teevan), University of Washington Press.

### Other Publications

1. Amy Karlson, Greg Smith, Brian Meyers, George Robertson, Mary Czerwinski, [Courier: A Collaborative Phone-Based File Exchange System](#), no. MSR-TR-2008-05, pp. 16, Microsoft Research, 2008.
2. Czerwinski, M.P., Ridsen, K. & Kanerva, A. (1996). Usability and web content: Emerging research trends at Microsoft Corporation. In the companion proceedings to the Human-Computer Interaction '96 Conference, People and Computers XI, Imperial College, London, August, 1996.
3. Czerwinski, M.P., Dringus, L., Sears, A. & Thomas, B.B. (1996). Educating HCI Practitioners: Evaluating what industry needs and what academia delivers. In the proceedings to the ACM SIGCHI '96 Human Factors in Computing Systems, April, Vancouver, B.C.

4. Czerwinski, M.P., & Jorna, G. (1994). Software review of MicroSaint for UNIX Operating Systems. *Ergonomics in Design*, April, 35-36.
5. Czerwinski, M.P. & Nguyen, T. (1993). Human Factors involvement in delivering an AI application to the enduser. Paper presented and published in the conference proceedings of *SOAR: Space Operations and Research*, August, Johnson Space Center in Houston.
6. Czerwinski, M.P., Chrisman, S.E., & Rudisill, M. (1991). Interruptions in multitasking situations: The effects of similarity and warning. *NASA Technical Report #JSC-24757*.
7. Czerwinski, M.P. (1990). Automated system function allocation and display format: Task information processing requirements. *NASA Technical Report # JSC-23892*.
8. Czerwinski, M.P. (1988). Differences between visual and memory search: Implications for models of attention. Unpublished doctoral thesis.
9. Nguyen, T., Czerwinski, M.P. & Lee, D. (1993). COMPAQ QuickSource: Providing the consumer with the power of artificial intelligence. *AI Magazine*, 14, 50-60.
10. Shiffrin, R.M., Czerwinski, M.P., & Lightfoot, N. (1991). On the automatization of visual search. *Indiana University Cognitive Science Research Report #48*, Indiana University, Bloomington, Indiana.
11. Tan, D., Gergle, D. & Czerwinski, M. (2005). A job-shop scheduling task for evaluating coordination during computer supported collaborative work. MSR-TR-2005-107, MSR Technical Report, August, 2005.
12. Weiler, P.M., & Czerwinski, M.P. (1992). The Human Factors Group at Compaq Computer Corporation. Lab review published in the proceedings of the *Association for Computing Machinery's (ACM) CHI '92 Conference*, May, Monterey, CA.

**Dissertation Committees:**

1. Andrea Grimes, 2010
2. Shengdong Zhao 2008
3. Tara Matthews 2006
4. Ji Soo Yi 2006
5. Duke Hutchings 2006
6. Stacey Nagata 2006
7. Shawn Sullivan 2006 (M.A. thesis)
8. Sonja Gievska 2005
9. Desney Tan 2004
10. David Modjeska 2000

**US Patents:**

1. 6,987,512 3D navigation techniques
2. 6,968,511 Graphical user interface, data structure and associated method for cluster-based document management
3. 6,909,443 Method and apparatus for providing a three-dimensional task gallery computer interface
4. 6,859,217 System and method to display and manage data within hierarchies and polyarchies of information
5. 6,590,593 Method and apparatus for handling dismissed dialogue boxes
6. 6,243,093 Methods, apparatus and data structures for providing a user interface, which exploits spatial memory in three-dimensions, to objects and which visually groups matching objects
7. 6,188,405 Methods, apparatus and data structures for providing a user interface, which exploits spatial memory, to objects
8. 6,034,687 Graphical interface for a computer hardware resource having a surrealist image of a real office machine
9. 5,987,528 Controlling the flow of electronic information through computer hardware
10. 5,974,468 Controlling the flow of electronic information through a modem
11. 5,922,071 Learning commands which automatically launch a computer program
12. 5,701,399 Integration of case-based search engine into help database

**Professional Memberships:**

Association for Computing Machinery  
ACM Special Interest Group on Computer-Human Interaction (SIGCHI)  
Human Factors and Ergonomics Society

**Volunteer Committee Work:**

Aparecio Foundation Advisory Board	2010-on
Georgia Tech's GVI Advisory Board	2008-on
Indiana Brain and Psychological Sciences Advisory Board	2006-on
Senior Women's Retention Task Force at Microsoft Corporation	2006
Georgia Tech HCI M.S. degree program Advisory Board	2006
DFKI (the German Research Center for Artificial Intelligence) HCIV workshop	2006
Indiana School for Informatics Dean's Advisory Board	2004-on
University of Maryland HCIL Advisory Board	2003

**Reviewing:**

Information Visualization, Human-Computer Interaction, International Journal of Human-Computer Studies, Transactions on Computer-Human Interaction, CHI, CSCW, Ubicomp, InfoVis, Transactions on Computer Graphics and Visualization, UIST, Interact, AVI, Memory and Cognition, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Learning, Memory and Cognition, HFES, IEEE Computer Graphics & Applications, ICMI, Graphics Interface, Applied Graphics and Visualization

**Invited Talks/Presentations:**

Keynote: Interact 2011	2011
Keynote: National Credit Union Association	2011
Invited Lecture, Georgia Tech University	2011
Distinguished Lecture, UBC	2010
Distinguished Lecture, MITRE	2010
Invited Lecture, UCSD	2010
Keynote: Society for Information Display Color Subgroup	2008
Keynote: Brazilian HCI 2008	2008
Keynote: CIC Society for Imaging Science and Technology	2008
Invited Lecture, Grace Hopper's Conference	2008
Distinguished Lectures in Computing, University of Michigan	2006
Eindhoven University of Technology Invited Lecture	2006
Invited Research Overview ACM CHI	2006
Carnegie Mellon HCII Anniversary Panel—The Future of HCI	2006
UW CSE Colloquia	2005
SAP lecture	2005
UIST Keynote	2004
Graphics Interface Keynote	2004
O'Reilly Emerging Technology Conference	2004
NAE/FOE Invited lecture	2004
TTI/Vanguard lecture	2004
Georgia Institute of Technology	2005
VL/HCC Keynote	2003
Simon Fraser Distinguished Speakers Series	2002
Information Visualization Keynote	2001
University of Michigan MOCHI lecture	2001
OCATE Frontiers of User Interface Research Distinguished Lecture Series: OGI	2001
Computing in the 21 <sup>st</sup> Century, Beijing, China	2001
Eindhoven University of Technology Invited Lecture	2000
Web Design and Development '99 Keynote	1999