

# Thomas Erickson ~ Interaction Design and Research

3136 Irving Ave. S, Minneapolis, MN 55408 (612) 823-3663 snowfall@acm.org www.visi.com/~snowfall/

## At a glance

### Aims

- Design, deploy and study prototypes of novel systems
- Study how people use existing systems, and in particular, how they turn sometimes recalcitrant technology to their own ends, with an eye to designing better systems
- Collaborate with a broad range of people—designers, engineers, researchers, users—from multiple backgrounds and disciplines

### Approaches

- Interaction design via sketches, prototypes, and iterative testing and re-design
- Fieldwork, especially case studies carried out via observation, surveys and interviews
- I approach problems in a multidisciplinary fashion, drawing on methods and theories from HCI, urban and environmental design, the social sciences and rhetoric

### Research Interests

- Social computing, that is, systems that support the gathering, representation, processing, use and dissemination of information that is distributed across social collectivities such as teams, communities, organizations and markets.
- Virtual communities, computer mediated communication, and other forms of online interaction, with particular emphasis on the ways in which visualization can be used to support online activity
- Personal information management systems
- Pattern languages and other interdisciplinary design methods

### Design Projects\*

- IBM Enhanced Audio Conferencing (IVR; visualization concept)<sup>1,2,3</sup>
- Online communities for small to medium sized groups (Babble<sup>1,2</sup> and Loops<sup>1,2</sup>)
- Social visualizations (aka social proxies) for conference calls<sup>1,2</sup>, auctions, searching, etc.
- A personal electronic notebook<sup>1,2</sup>
- Information retrieval and management systems (Rosebud<sup>1</sup>, AppleSearch<sup>1,3</sup>, WAIS<sup>1,3</sup>)
- A pen and touch-based tablet computer on the PowerBook platform<sup>1</sup>
- Speech and gesture-driven 3D design environment<sup>1</sup>
- Data linking (Mac System 7 Publish and Subscribe)<sup>1,2,3</sup>
- Integrated software package (Open Access)<sup>1,3</sup>

\* NB. Almost all of this is done in collaboration with others

<sup>1</sup>Designed and implemented   <sup>2</sup>Deployed and studied   <sup>3</sup>Product or released for general use

### Professional Activity

- I'm very active in the fields of human computer interaction and computer supported cooperative work. I publish a lot, regularly organize workshops, and am a frequent invited speaker. I review for a variety of conferences and journals, evaluate book manuscripts and grant applications, and serve on editorial boards and program committees.

### Professional Service

- I serve on the SIGCHI conference management committee, which sets goals and strategy for all SIGCHI conferences. Previously I've served on the editorial boards of JCMC, JCSW, and SMCA. I also serve on many conference committees, usually in relation to publications. I advise students, lecture to classes, mentor prospective authors and serve on PhD committees.

### Publications and Patents

- Over sixty publications, ranging from conference papers to articles for broader audiences
- Fifty-plus peer-reviewed articles and book chapters; two edited books
- Patents: 8 granted; 7 more filed

### References

- Available on request

# Work and Educational History

## IBM T. J. Watson Research Center

**Research Staff Member, Social Computing Group, IBM Research  
6/97-now, W. Kellogg**

My job at Watson is to study and design novel online systems for communication and collaboration. I approach this by combining empirical studies of existing systems—with particular attention to how users adapt systems to their own ends—and the design, implementation, deployment and study of system prototypes. Deliverables range from patents and publications to working systems and impact on IBM products and services.

The primary theme in my work involves designing and studying the use of social proxies, minimalist visual representations of the on-line presence and activities of groups of people (e.g., communities, audiences, customers, crowds, etc.). Other foci of interest include expertise sharing, organizational processes, personal information management systems, and pattern languages. I am also charged with developing the larger research strategy for the group, and I assist in its day to day operation by organizing lab meetings and mentoring junior group members.

I have telecommuted to Watson's New York location from my home in Minneapolis since I was hired, using telephony, email, and textual chat (supplemented with periodic travel) to carry out my tasks.

## Advanced Technology Group, Apple

**User Experience & Discourse Architecture Labs, ATG, Apple  
7/95-5/97, A. Henderson**

Teleworked with other researchers developing new product concepts and exploring conceptual foundations of computing, particularly with regard to social issues. Research foci included network-mediated discourse, visualization of textual conversations, remote presence, telework practices, and support for distributed interdisciplinary design teams. Also founded and edited *The Apple Labs Review*, a monthly, in-house research publication.

**User Experience Architects' Office, ATG, Apple  
5/93-7/95, D. Norman**

Teleworked in 4 person group chartered to maintain and evolve the vision of Apple's future product family. Activities included design strategy, conceptual design, scenario making, writing, and consulting with various groups across Apple.

**Human Interface Group, ATG, Apple  
4/88-5/93, J. Mountford**

Worked on a series of small interdisciplinary teams designing advanced product concepts. Our approach was to study users, observe their needs and practices, create prototypes, test and revise them, and evangelize the concepts to product groups.

## Software Products International

**Software Products International (1983-88)**

Worked as 'user interface czar', responsible for interface standards and cross-product consistency for the Open Access line of integrated software. Designed the interface for SPI's first post-OA product, Access SQL, a Windows database.

## Education

**MA, ABD, Psychology, UC San Diego  
1978-83, McClelland, Norman, Rumelhart lab**

Principal research focus was on how people understand metaphors in particular, and language in general; also focused on human-machine interaction, human error, and memory.

**BA, *cum laude*, Psychology, Rice University (1978)**

Received 4-year NSF fellowship to do graduate work in Psychology.

# Recent Activity

## Selected Papers

A short overview of my primary thread of research can be found in

- [Social Translucence: Designing Social Infrastructures that Make Collective Activity Visible \[pdf\]](#) In *Communications of the ACM* (ed. J. Preece), 45:4, 40-44, 2002

Other papers that highlight significant areas of work and interest are:

- [Social Translucence: Using Minimalist Visualizations of Social Activity to Support Collective Interaction](#). In *Readings in Social Navigation of Information Spaces* (eds. K. Höök, D. Benyon, A. Munro). Springer, 2002 pp. 17-42.
- [Figuring Out How to Figure Out: Supporting Expertise Sharing in Online Systems](#). In *Resources, Co-Evolution and Artifacts: Theory in CSCW*. Springer, 2008.
- [A Social Proxy for Distributed Tasks: Design and Evaluation of a Working Prototype](#). In *The Proceedings of CHI 2004*. ACM Press, 2004.
- [Some Problems with the Notion of Context-Aware Computing](#). In *Communications of the ACM* (Technical Opinion), 45:2, pp. 102-104, 2002.
- [Lingua Francas for Design: Sacred Places and Pattern Languages](#). In *Proceedings of DIS 2000*. New York, ACM Press, 2000.

## Invited Talks

- Keynote: Designing Convivial Environments: Supporting Coordination Among Distributed Groups. Tools for Distributed Communities Workshop, (12/07, Sydney)
- Keynote: “Social Proxies: Minimalist Visualizations of Social Context in Online Systems.” Social Software (3/06, Vienna)
- Keynote: “Designing Online Systems that Support Collective Intelligence.” Social Intelligence Design 2006 (3/06, Osaka)
- Key Lecture: “Inhabited Models: Supporting Coherent Behavior in Online Systems.” User Modeling 2005 (7/05, Edinburgh)
- Lecture: “On Designing Social Visualizations Supporting Coherent, Collective Interaction.” Banff New Media Institute 10-year Anniversary Summit (5/05, Banff)
- Keynote: “On Designing Sociable Digital Systems.” European Conference on AI. Second European Symposium on Ambient Intelligence (11/04, Eindhoven)
- Closing Plenary: “Convivial Systems: Designing Socially Rich Digital Environments.” British HCI Conference (9/04, Leeds)
- Closing Plenary: “Designing Online Collaborative Environments: Social Visualizations as Shared Resources.” LAP 2004 (6/04, New Brunswick, NJ)
- Lecture: “Social Computing as Social Computation: Design Issues.” The Social Computing Symposium (3/04, Seattle)

## Professional Activity and Service

### Ongoing

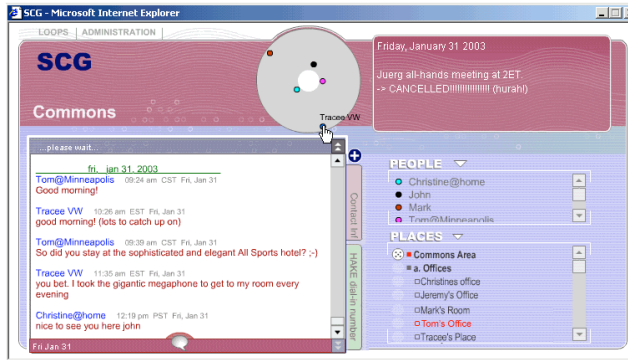
- Conference Management Committee, SIGCHI (since 8/05)
- Editorial Advisory Board, Journal of Computer-Supported Cooperative Work (since 1/04)
- Co-organizer of the Persistent Conversation Workshop & Minitrack, HICSS (since '99)
- Regularly advise students, mentor CHI authors and give classroom lectures
- Regularly review article submissions, book manuscripts and grant applications

### Recent

- Co-Chair, Long Papers, CHI 2003 (organized and administered the process for the submission and review of over 400 papers by close to a thousand volunteers)
- Associate Editor, IEEE Transactions on Systems, Man and Cybernetics, Part A (2003)
- Co-Editor, Special Issue of the HCI Journal on “Talking About Things.”(2003)
- Visiting Associate Professor, Interaction Design Institute Ivrea, Ivrea, Italy (June, 2002)
- Acting Chair, Design Portfolios, Practitioners Track, CHI (2002)
- Co-organizer of four workshops on virtual community: Sustaining Community (Group '05); Discourse Architectures (CHI '02); Dealing with Community Data (CSCW '00); Research Issues in the Design of Online Communities (CHI '99)
- NSF Grant: “Field Studies of Organizational Memory and Information Reuse,” with Ackerman, Halverson and Kellogg (2001-2004)
- Adjunct Associate Professor, Department of Architecture, U of Minnesota (2001-2002)
- Developed/taught “Design in the Digital Age” (3 times). U of Minnesota (1999-2002)
- Adjunct Assistant Professor, Department of Architecture, U of Minnesota (2000-2001)

# Selected Design Work

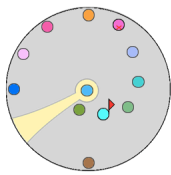
## Online Community, 1997-2003



Loops, a successor to Babble, is a persistent chat system for small groups. My primary contribution is the “social proxy” (upper center); it shows how many are present (number of dots), who has recently spoken (distance from center), etc.

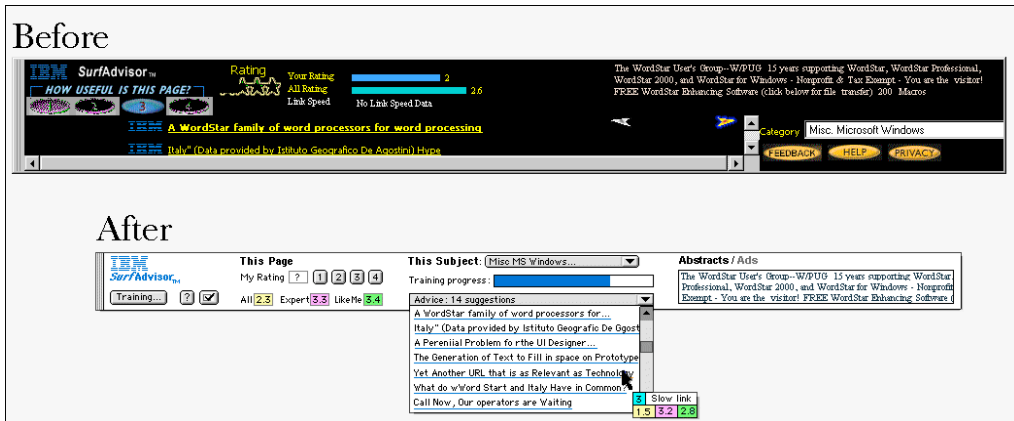
Many others contributed to Loops, especially Wolf, Laff, and Smith.

## VoIP Telephony, 2001-2005



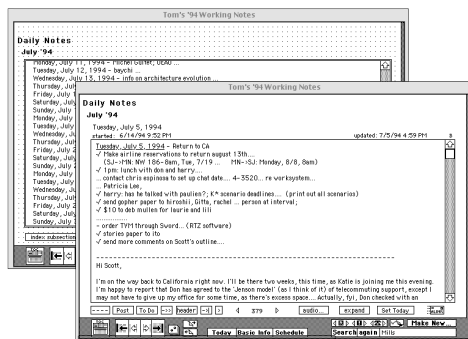
This conference call visualization enables participants in a conference call to see who is speaking (center), who has recently spoken (distance from center), and provides a backchannel for indicating who has questions, who is on mute, etc. It is small and simple enough to fit on a handheld device. (This is one of a series of designs that use minimalist visualizations to support online activities such as actions, e-commerce, and online meetings—see Erickson and Kellogg, 2002. See Ding, et al., 2007, for a study of it in an implemented system.)

## Web Browsing, 1997-1998



Before and after pictures of “Surf Advisor,” a browser add-on that enables users to rate web pages and get suggestions of other relevant pages. I was brought in as a consultant; my contributions were developing a simpler visual design and conceptual structure.

## Personal Information Management, 1993-1996



Beginning as a personal experiment, this HyperCard-based personal notebook explored integrating note-taking and email, end-user customization, and was one of the sources of the “stamp” concept, patented by Apple (Vertelney, et al., 1991/1992) and used in the interface of Scribe, a powerbook-based tablet computer.

Erickson (1996) discusses the lessons learned from several years of use. The Scribe work was never published, as it was on product track until derailed by Newton.

# Publications

\* Peer-reviewed      c Book chapter      e Edited work      b Book

- \* Farrell, R. G., Danis, C. M., Erickson, T., Ellis, J. B., Christensen, J. E. Bailey, M. and Kellogg, W. A. A Picture and a Thousand Worlds: Visual Scaffolding for the Developing World. *International Journal of Handheld Computing Research*. To appear, 2010.
- \* Erickson, T. “‘Social’ Systems: Designing Digital Systems that Support Social Intelligence.” *AI and Society*, 23:2, 147-166, 2009.
- c Erickson, T. Socio-Technical Design. *Handbook of Research on Socio-Technical Design and Social Networking Systems* (eds. B. Whitworth and A de Moor), pp 333-334. IGI Global, 2009.
- \* Erickson, T., Danis, C., Kellogg, W. A., Helander, M. E.. “Assistance: The Work Practices of Human Administrative Assistants and their Implications for IT and Organizations.” *Proc. CSCW '08*. ACM Press, 2008. **Best paper award, CSCW 2008.**
- e/b Erickson, T. and McDonald, D. W. (eds) *HCI Remixed: Essays on Works that have Influenced the HCI Community*. MIT Press, 2008.
- c Erickson, T. “Knowing the Particulars.” In Erickson, T. and McDonald, D. W. (eds) *HCI Remixed: Essays on Works that have Influenced the HCI Community*. pp xx-xx. MIT Press, 2008.
- e/b Ackerman, M. S., Halverson, C. A., Erickson, T., and Kellogg, W. A. (eds.) *Resources, Co-Evolution and Artifacts: Theory in CSCW*, pp. 95-144. Springer, London, 2008.
- c Erickson, T, Halverson, C. A., and Kellogg, W. A. “Figuring Out How to Figure Out: Supporting Expertise Sharing in Online Systems.” *Resources, Co-Evolution and Artifacts: Theory in CSCW*, pp. 95-144. Springer, London, 2008.
- \* Ding, X., Erickson, T., Kellogg, W.A., Levy, S., Christensen, J.E., Sussman, J., Wolf, T.V. and Bennett, W.E. An Empirical Study of the Use of Visually Enhanced VoIP Audio Conferencing: The Case of IEAC. *The Proceedings of CHI 2007*. New York: ACM Press, 2007.
- \* Bellamy, R.K.E., Erickson, T., Fuller, B., Kellogg, W.A., Rosenbaum, R., Thomas, J.C., and Vetting Wolf, T. Seeing is Believing: Design Visualizations for Managing Risk and Compliance. *IBM Systems Journal*, 46:2, 207-218, 2007.
- \* Kellogg, W. A., Erickson, T., Wolf, T. V., Levy, S., Christensen, J., Bennett, W.E. Leveraging Digital Backchannels to Enhance User Experience in Electronically Mediated Communication. *The Proceedings of CSCW '06*. ACM Press.
- \* Ivanov, A., Erickson, T., Cyr, D. “Plot-polling: Collaborative Knowledge Visualization for Online Discussions.” *Proceedings of the 10th International Conference on Information Visualization*. IEEE Press, 2006.
- \* Erickson, T., Halverson, C. A., Kellogg, W. A., Laff, M. R. Sussman, J., Wolf, T. and Edwards, D. “A Persistent Chat Space for Work Groups: The Design, Evaluation and Deployment of Loops.” *The Proceedings of DIS '06*. ACM Press, 2006.
- \* Weisz, J. D., Erickson, T., and Kellogg, W.A. “Broadcast Synchronous Messaging: The Use of ICT.” *The Proceedings of CHI 2006*. New York: ACM Press, 2006.
- Erickson, T. “From PIM to GIM: Personal Information Management in Group Contexts.” *Communications of the ACM*. Vol 49, No. 1, 75-76. ACM Press: January 2006.
- c Erickson, T. “Five Lenses: Towards a Toolkit for Interaction Design.” *Theories and Practice in Interaction Design* (ed. S. Bagnara, G. Crampton-Smith, G. Salvendy). Lawrence Erlbaum

Associates, April 2006.

Erickson, T. "Inhabited Models: Supporting Coherent Behavior in Online Systems." *User Modeling 2005, Lecture Notes in Computer Science*, Vol 3538, pp. 5-8. Springer, 2005.

Kellogg, W.A. and Erickson, T. "Supporting Appropriation Work with Social Translucence, Collective Sensemaking, and Social Scaffolding." In Dittrich, Y., Dourish, P., Mørch, A., Pipek, V., Stevens, G., and Törpel, B. Special Issue on Supporting Appropriation Work, *International Reports on Socio-Informatics (IRSI) (2:2)* pp. 84-97, 2005.

- \* Halverson, C., Erickson, T., and Ackerman, M. "Behind the Help Desk: Evolution of a Knowledge Management System in a Large Organization." *The Proceedings of CSCW 2004*. ACM Press, 2004.

Erickson, T. "Designing Online Collaborative Environments: Social Visualizations as Shared Resources." *Proceedings of the 9th International Working Conference on the Language Action Perspective on Communication Modeling*, pp. 143-157.

Erickson, T. and Kellogg, W. A. "Social Proxy." *The Encyclopedia of Human-Computer Interaction*. Berkshire Publishing Group, LLC, 2004.

Voida, A., Mynatt, E. D., Erickson, T. and Kellogg, W.A. "Interviewing Over Instant Messaging." *The Proceedings of CHI 2004: Extended Abstracts*. ACM Press, 2004. [Short paper]

- \* Erickson, T., Huang, W., Danis, C. and Kellogg, W.A. "A Social Proxy for Distributed Tasks: The Design and Evaluation of a Working Prototype." *The Proceedings of CHI 2004*. ACM Press, 2004.
- \* Halverson, C. A., Erickson, T. & Sussman, J. "What Counts as Success? Punctuated Patterns of Use in a Persistent Chat Environment." *The Proceedings of GROUP 2003*. New York: ACM Press, 2003.
- \* Erickson, T. "Designing Visualizations of Social Activity: Six Claims." *The Proceedings of CHI 2003: Extended Abstracts*, pp 846-847. New York: ACM Press, 2003. [Short paper]

- e *Proceedings of the CHI 2003 ACM Conference on Human Factors in Computing Systems, CHI Letters*, 5(1), eds. V. Bellotti, T. Erickson, G. Cockton and P. Korhonen, ACM Press: New York, ISBN: 1-58113-630-7, 2003.

Churchill, E. and Erickson, T. "Introduction to this Special Issue on Talking about Things in Mediated Conversations." *Human Computer Interaction*, Vol. 18 Nos. 1&2, pp 1-12. Lawrence Erlbaum Associates, 2003.

- e Special Issue on Talking about Things in Mediated Conversations. *Human Computer Interaction*, Vol. 18 (1&2), eds. Churchill, E. and Erickson, T. Lawrence Erlbaum Associates, 2003.
- c Erickson, T. and Kellogg, W. A. "Knowledge Communities: Online Environments for Supporting Knowledge Management and its Social Context." *Sharing Expertise: Beyond Knowledge Management* (eds. Ackerman, Mark, Volkmar Pipek, and Volker Wulf). Cambridge, MA, MIT Press, 2003, pp. 299-326.
- c Erickson, T. and Kellogg, W.A. "Social Translucence: Using Minimalist Visualizations of Social Activity to Support Collective Interaction." *Readings in Social Navigation of Information Spaces* (eds. K. Höök, D. Benyon, A. Munro). Springer, 2002 pp. 17-42.

Erickson, T., Halverson, C., Kellogg, W. A., Laff, M. and Wolf, T. "Social Translucence: Designing Social Infrastructures that Make Collective Activity Visible." *Communications of the ACM* (Special issue on Community, ed. J. Preece), Vol. 45, No. 4, pp. 40-44, 2002.

Erickson, T. "Theory Theory." Quoted in full in "Coda" by B. Nardi, *The Journal of Computer Supported Cooperative Work: Special Issue on Activity Theory* (ed. B. Nardi), Vol. 11, Nos. 1-2, pp 269-270. ACM Press, 2002.

- \* Hudson, J. M., Christensen, J., Kellogg, W. A., and Erickson, T. "'I'd be Overwhelmed, But It's Just One More Thing to Do:' Availability and Interruption in Research Management." *Human Factors in Computing Systems: The Proceedings of CHI 2002*, ACM Press, 2002.

Erickson, T. & Herring, S. "Persistent Conversation: A Dialog Between Research and Design," *Proceedings of HICSS 2002*, IEEE Press, 2002

Erickson, T., Herring, S. and Sack, W. "Discourse Architectures: Designing and Visualizing Computer Mediated Conversation." *The Proceedings of CHI 2002: Extended Abstracts*. ACM Press, 2002.

- \* Erickson, T., Halverson, C., Kellogg, W. Laff, M. and Wolf T. "Social Translucence: Designing Social Infrastructures that Make Collective Activity Visible." *Communications of the ACM* (Special issue on Community, ed. J. Preece), Vol. 45, No. 4, pp. 40-44, 2002.

Erickson, T. "Some Problems with the Notion of Context-Aware Computing." *Communications of the ACM* (Technical Opinion), Vol 45, No. 2, pp. 102-104, 2002.

Erickson, T. "Here and There, Now and Then: A Long-Distance Teleworker's Reflections on 'Workplace.'" Special issue of the *SIGGROUP Bulletin* on "Workplace" (ed. E. Churchill, and A. Munro), Vol 22, No. 3, pp 5-10. New York: ACM Press, December 2001.

- \* Thomas, J., Kellogg, W. A., Erickson, T. "The Knowledge Management Puzzle: Human and Social Factors in Knowledge Management." *The IBM Systems Journal*. Volume 4, Number 4, pp. 863-884, 2001.
- \* Erickson, T. & Laff, M. "The Design of the 'Babble' Timeline: A Social Proxy for Visualizing Group Activity over Time." *Human Factors in Computing Systems: CHI '01 Conference Proceedings*. New York: ACM Press, 2001. [Short paper.]
- \* Erickson, T. & Kellogg, W. "Social Translucence: Designing Systems that Support Social Processes." *Human-Computer Interaction in the New Millennium* (ed. J. Carroll). Addison-Wesley, 2001.

Erickson, T., Fisher, D., Bruckman, A. & Lueg, C. "Dealing with Community Data: A Report on the CSCW 2000 Workshop" *SIGCHI Bulletin*. ACM Press: July/August 2001.

Erickson, T. & Herring, S. "Persistent Conversation: A Dialog Between Research and Design." [Minitrack Introduction] In the *Proceedings of the Thirty-Second Hawaii International Conference on Systems Science*. (ed. J. F. Nunamaker, Jr. R. H. Sprague, Jr.), January, 2001.

- \* Erickson, T. "Lingua Francas for Design: Sacred Places and Pattern Languages." In *Proceedings of DIS 2000* (Brooklyn, NY, August 17-19, 2000). New York, ACM Press, 2000.
- \* Erickson, T. & Kellogg, W. "Social Translucence: An Approach to Designing Systems that Mesh with Social Processes." In *Transactions on Computer-Human Interaction*. ACM Press, 2000.
- \* Erickson, T. "Towards a Pattern Language for Interaction Design." In *Workplace Studies: Recovering Work Practice and Informing Systems Design*. (eds. P. Luff, J. Hindmarsh, C. Heath) Cambridge University Press, 2000.
- \* Erickson, T. "Making Sense of Computer-Mediated Communication (CMC): Conversations as Genres, CMC Systems as Genre Ecologies." *Proceedings of the Thirty-Third Hawaii International Conference on Systems Science*. (ed. J. F. Nunamaker, Jr. R. H. Sprague, Jr.), IEEE Press, January, 2000.

- \* Bradner, E., Kellogg, W., & Erickson, T. "The Adoption and Use of Babble: A Field Study of Chat in the Workplace." *Proceedings of the European Computer Supported Cooperative Work (ECSCW '99) conference*, 1999.
- \* Erickson, T., Smith, D. N., Kellogg, W. A., Laff, M. R., Richards, J., and Bradner, E. "Socially Translucent Systems: Social Proxies, Persistent Conversation, and the Design of Babble." *Human Factors in Computing Systems: CHI '99 Conference Proceedings*. New York: ACM Press, 1999.
- Erickson, T. "Persistent Conversation: Discourse as Document." [Minitrack Introduction] *Proceedings of the Thirtieth Hawaii International Conference on Systems Science*. (ed. J. F. Nunamaker, Jr. R. H. Sprague, Jr.), January, 1999.
- Bradner, E., Kellogg, W., & Erickson, T. "Babble: Supporting Conversation in the Workplace." *SIGGROUP Bulletin*, Vol. 19, No. 3, Dec. 1998, pp 8-9. ACM Press, 1998.
- Erickson, T. "Some Notes on the Experience of Being a Teleworker," in *The Environmental and Architectural Phenomenology Newsletter* (ed. David Seamon), vol 9, No. 3, Fall 1998.
- Jean Scholtz, Bellotti, V., DeGroot, J., Erickson, T. Schirra, L., Lund, A. "Telework: When Your Job is on the Line." *Interactions*, Vol. V.1. January/February 1998.
- \* Erickson, T. "Social Interaction on the Net: Virtual Community as Participatory Genre." In *Proceedings of the Thirtieth Hawai'i International Conference on Systems Science*. (ed. J. F. Nunamaker, Jr. & R. H. Sprague, Jr.) Vol. 6, pp. 23-30. IEEE Computer Society Press: Los Alamitos, CA, 1997.
- c Erickson, T. "Designing Agents as if People Mattered." *Intelligent Agents* (ed. J Bradshaw.) AAAI Press, 1997.
- Erickson, T. "Design as Storytelling." *Interactions*. Vol. 3, no. 4, July/August, 1996.
- \* Erickson, T. "The Design and Long-Term Use of a Personal Electronic Notebook." *Human Factors in Computing Systems: CHI '96 Conference Proceedings*. New York: ACM Press, 1996.
- Erickson, T. "The World Wide Web as Social Hypertext." In Viewpoints, *Communications of the ACM*, January 1996.
- c Erickson, T. "Coherence and Portrayal in Human-Computer Interface Design." R.J. Beun, M. Baker & R. Reiner (eds.) *Dialogue and Instruction: Modeling Interaction in Intelligent Tutoring Systems*. Berlin: Springer, 1995.
- \* Nardi, B., Anderson, K. & Erickson, T. "Filing and Finding Computer Files." *Proceedings of the East-West HCI Conference*. July, 1995.
- \* McCahill, M. P. & Erickson, T. "Design for a 3D Spatial User Interface for Internet Gopher." In *Proceedings of ED-MEDIA 95: World Conference on Educational Multimedia and Hypermedia*, (ed. H. Maurer) Graz: Austria: 1995.
- c Erickson, T. "Notes on Design Practice: Stories and Prototypes as Catalysts for Communication." In *Scenario-Based Design: Envisioning Work and Technology in System Development* (ed. J. Carroll). New York: Wiley, 1995.
- Salomon, G., Wong, Y.Y, Erickson, T., & Kemink, J. "Interfaces for Adaptive Systems: Design of a Personal Wayfinder." In *American Center Report*. American Center for Design: 1994.
- \* Kahle, B., Morris, H., Davis, F., Erickson, T., Hart, C., & Palmer R. "Wide Area Information Servers: An Executive Information System for Unstructured Files." *Advisory Group for Aerospace Research and Development Conference Proceedings 544: International High Speed Networks for Scientific and Technical Information*. October, 1993.

- \* Erickson, T. "From Interface to Interplace: The Spatial Environment as a Medium for Interaction." *Proceedings of the European Conference on Spatial Information Theory*. (Heidelberg: Springer-Verlag, 1993).
  - c Erickson, T. "Artificial Reality and the Visualization of Data." *Virtual Reality Applications* (ed. A. Wexelblat). Academic Press, 1993.
  - \* Kahle, B., Morris, H., Goldman, J., Erickson, T. & Curran, J. "Interfaces for Distributed Systems of Information Servers." *Proceedings of the American Society for Information Science Conference*, May 1992.
  - c Erickson, T. "Apple's Approach to Interface Design." Chapter 4 of the *Friend21 Committee Report*. 1991.
  - \* Erickson, T. & Salomon, G. "Designing a Desktop Information System: Observations and Issues." *Human Factors in Computing Systems: CHI '91 Proceedings* . ACM: 1991.
  - \* Mercurio, P. J. & Erickson, T. "Interactive Scientific Visualization: An Assessment of a Virtual Reality System." *Human Computer Interaction: Proceedings of Interact '90*. Elsevier: 1990.
  - c Erickson, T. "Creativity and Design: Introduction." *The Art of Human Computer Interface Design* (ed. B. Laurel). Addison-Wesley: 1990.
  - c Erickson, T. "Working with Interface Metaphors." *The Art of Human Computer Interface Design* (ed. B. Laurel). Addison-Wesley: 1990.
  - c Erickson, T. "Interface and the Evolution of Pidgins: Creative Design for the Analytically Inclined." *The Art of Human Computer Interface Design* (ed. B. Laurel). Addison-Wesley, 1990.
- Erickson, T. "Interfaces for Cooperative Work: An Eclectic Look at CSCW '88." *SIGCHI Bulletin*, 21: 1, pp. 56-64. ACM: July, 1989.
- Perlman, Gary & Erickson, T. "Abstraction Program Aids to Documentation." *Asterisk*. ACM SIGDOC: 1984.
- \* Perlman, Gary & Erickson, T. "Graphical Abstractions of Technical Documents." *Visible Language*, Vol. 23, No. 4, Autumn 1983.
- Erickson, T. "Cocoon." *Analog*, 130-143, November, 1982. (Fiction.)
- \* Erickson, T. & Mattson, M. E. "From Words to Meaning: A Semantic Illusion." *Journal of Verbal Learning and Behavior*, 20, 540-551. 1981.

\* Peer-reviewed

c Book chapter

e Edited work

b Book

# Patents

## Issued

CN ZL200410054449.2 (US 20,050,027,800 A1), Agenda-driven Meetings.  
Erickson, Kellogg, Malkin and Wolf.  
Issued May 14, 2008; filed July 28, 2003.

US 7,249,180, Method and System for Marketplace Social Proxies.  
Erickson and Malkin.  
Issued July 24, 2007; filed November 30, 2000.

US 6,970,931, Method for Translucent Online Interaction.  
Bellamy, Ellis, Erickson, Kellogg, Laff, Malkin, Richards, Yu and Wolf.  
Issued: November 29, 2005 also in SG 2/28/05 and TW 8/19/03; filed: September 14, 2000

US 6,944,655 B1, User Defined Online Interaction Method and Device.  
Bellamy, Ellis, Erickson, Kellogg, Laff, Malkin, Richards and Yu.  
Issued: September 13, 2005; filed: April 3, 2000

US 20,020,133,548 A1, System and Method for a Distributed Social Proxy.  
Erickson, Malkin and Wolf.  
Issued in TW (TW0561356B, March 5, 2004), pending in U.S.; filed: March 14, 2001.

US 6,591,265, Dynamic Behavior-based Access Control System and Method.  
Erickson, Kellogg, Malkin, Richards, and Yu.  
Issued: July 8, 2003; filed April 3, 2000.

US 5,341,293, User Interface Systems having Programmable User Interface Elements.  
(Extension of US 5,202,828)  
Vertelney, Erickson, Mountford, Thompson-Rohrlich, Salomon, Wong, Venolia, Gomoll,  
and Hulteen.  
Issued August, 23, 1994; filed September 3, 1992.

US 5,202,828, User Interface Systems having Programmable User Interface Elements.  
Vertelney, Erickson, Mountford, Thompson-Rohrlich, Salomon, Wong, Venolia, Gomoll,  
and Hulteen.  
Issued April, 13, 1993; filed May 15, 1991.

## Filed

Articulation Workload Metrics  
Helander, Danis, Rosenbaum, Erickson, Kellogg, Dietrich, Gospodinoff  
Filed, May 20, 2008. YOR920070766US1 / USPTO 12/123743

System and Method for Usage-Based Misinformation Detection and Response  
Malkin, Erickson, Hailpern, Kellogg.  
Filed January 31, 2006. YOR9-2005-0348.

US20070162908A1 Behavior-based Resource Capacity Adjustment Method for Business  
Processes, Erickson, Hailpern, Kellogg, Malkin.  
Filed January 6, 2006. YOR9-2005-0462.

US20070094590A1. System and Method for Providing Dynamic Process-Step Annotations.  
Erickson, Hailpern, Kellogg, Malkin, Bergman, Castelli, Oblinger.  
Filed October 20, 2005. YOR8-2005-0480.

US 20,070,033,086 A1: System and method for interacting with participants of a future event.  
Christensen, Erickson, Malkin, Richards, Sussman.  
Filed August 4, 2005.

US 20,050,165,785 A1, Social Network Surfing.  
Malkin, Erickson, Kellogg.  
Filed January 23, 2004.

YOR9-2003-0219. Representations of Queries in Search Spaces as a Resource for Interaction.  
Erickson, Malkin.  
Filed September, 18, 2003.