Mr. Bender is the Executive Director of the MIT Media Laboratory and Senior Research Scientist at MIT. He received his BA from Harvard University in 1977; joined the Architecture Machine Group at MIT in 1978; and received his MS at MIT in 1980. A founding member of the Media Laboratory, Mr. Bender is engaged in the study of new information technologies, particularly those that effect people directly. Much of the research addresses the notion of building upon the interactive styles associated with existing media and extending them into domains where a computer is incorporated into the interaction. He has participated in much of the pioneering research in the field of electronic publishing, including the “Aspen Movie Map,” and the “NewsPeek Electronic Newspaper,” both early examples of personalized interactive multimedia.

Mr. Bender is active in many national and international technical conferences and committees. He has been on the Advisory Board for the VTT Information Technology Research Center of Finland; a Visiting Professor at the University of Tampere, Finland; and a founder of Salient Stills, Inc. He was a member of the IBM Mobile Scientific Advisory Board; and a board member of Salient Stills, Inc. Mr. Bender is the author of numerous technical conference and journal articles, book chapters, and magazine articles about media technology. He has lectured nationally and internationally on the topics of electronic publishing, media technology, and computer graphics. Mr. Bender was the 1992-1993 Visiting Lecturer of The Society for Imaging Science and Technology. He has served as a consultant in the areas of graphic design, digital typography, digital color, and interactive video.

**Publications**


“An audio-based personal memory aid,” with S. Vemuri, C. Schmandt, S. Tellex, B. Lassey,


“When product designers use perceptually based color tools,” Proceedings of SPIE 3299 Human
“Technology and the news: what we don’t know,” IEEE Multimedia 3(3) 73–7 (Fall 1996).
“Lossy compression of palettized images,” with Y. Chen and H. Peterson, Proceedings of ICASSP


“Towards the development of a color communications system based upon a correspondence between color combinations and qualitative signals,” AMG Memo, (1985).

Selected Presentations

Invited talk at Digital Media Lab Opening Ceremony, Information and Communications University, Seoul, Korea, 2003.
“The Daily Me: A 20-year searching pursuit of personalized media,” 13th Annual Canadian
“Technology as a Force Towards a Digital Culture,” Primer Foro Internacional de la Cultura Digital, Mexico City, Mexico, 1999
Keynote Address, Internet, Multimedia, and Related Information Technology, England, 1997
“Violating Expectations of Color Order,” IS&T/SPIE’s Electronic Imaging ‘96: Science and
Technology, San Jose, California, 1996.
“Knowing the User,” CASCON ’95 Meeting of the Minds, Toronto, Canada, 1995.
“Developments in Information Technologies,” Forum Folha de Journalismo e Midia, Sao Paulo, Brazil, 1993.
“The Newspaper of the Future,” The Newspaper of the Future Symposium, MIT Media Lab,
IS\&T/SPIE Electronic Imaging Conference, Imaging Systems Program Chair, 1990.
Media’s Countdown to 2000: Survive or Thrive, DEC Corporate Leaders Forum, 1990.
COIS’90 Program Committee, 1990.
Color at the interface, ACM SIGCHI, Boston chapter, 1989.
Encontro Internacional de Jornalismo (International Conference on Journalism), Brazil, 1989.
Hypertext Session Chair, COIS88, ACM SIGOIS, 1988.

**Patents**

Method of Creating a High Resolution Still Image Using a Plurality of Images and Apparatus for Practice of the Method, No. 5,920,657, 1997.
Method and Apparatus for Data Hiding in Images, No. 5,689,587, 1996.
Method and Apparatus for Logo Hiding in Images, No. 6,201,879, 1996.
Method and Apparatus for Echo Data Hiding in Audio Signals, No. 5,893,067, 1996.

Video Image Compositing Techniques, No. 5,262,856, 1992. (Transferred to Public Domain)
Pending patent: Method and Apparatus for Tartan Threads, MIT Case No. 7754T

**Theses supervised**

Vemuri, Sunil, *Personal Long-Term Memory Aids*, Thesis Media Arts and Science 2004 Ph.D.
Welti-Santos, Larissa, *Topology of learning and correction in dynamic balance*, Thesis Media Arts and Science 2004 S.M.
Gerasimov, Vadim, *Every Sign of Life*, Thesis Media Arts and Science 2003 Ph.D.
Gonzalez Pinto, Jose Maria, *A knowledge-network model of scientific communities*, Thesis Media Arts and Science 2002 S.M.
Monroy Fonseca, Marco Antonio, *Developing a framework for a minority language-based utility*, Thesis Media Arts and Science 2002 S.M.
Srinivasan, Ramesh, *Village Voice: expressing narrative through community-designed ontologies*, Thesis Media Arts and Science 2002 S.M.

Stouffs, Alexandre, *Clotho, a collaborative information weaving tool*, Thesis Media Arts and Science 2002 S.M.

Marlow, Cameron Alexander, *A language-based approach to categorical analysis*, Thesis Media Arts and Science 2001 S.M.


Orwant, Jon, *EGGG: The extensible graphical game generator*, Thesis Media Arts and Science 2000 Ph.D.

Turpeinen, Marko Sakari, *Enabling, modeling and interconnecting active community publishers*, Thesis Media Arts and Science 2000 S.M.


Koen, Douglas B., *Time frames*, Thesis Media Arts and Science 2000 S.M.


Berzowska, Joanna Maria, *Computational expressionism: a study of drawing with computation*, Thesis Media Arts and Science 1999 S.M.

Gerasimov, V., *Things that talk*, Thesis Media Arts and Science 1996 M.S.


Massey, Michael, *Storytelling with salient stills*, Thesis Media Arts and Science 1996 M.S.


Dienes, Klee, *Information architectures for personalized multimedia*, Thesis Media Arts and Science 1995 M.S.


Kliger, Jill Susan., *Model planes and totem poles: methods for visualizing user models*, Thesis Media Arts and Science 1995 M.S.

Dolan, M. Cristina., *Not that they in or lose, but how you watch the game: personalized sports viewing*, Thesis Media Arts and Science 1994 M.S.

Hinds, Raynard Orin., *Video resolution enhancement with multiple motions*, Thesis E.E. 1995 M.S.

Kortekaas, L. Mark., *News and education: creation of "The Classroom Chronicle"*, Thesis Media Arts and Science 1994 M.S.
Feldman, Uri, *Quantifying the dimensions of color experience*, Thesis Media Arts and Science 1993 Ph.D.

Blount, Alan Wayne., *Self-organizing news*, Thesis Media Arts and Science 1993 M.S.


Orwant, Jon, *Doppelgänger goes to school : machine learning for user modeling*, Thesis Media Arts and Science 1993 M.S.


Chee, Yi-Min., *A FAX application for the NeXT computer*, Thesis E.E. 1991 B.S.

Lie, Håkon Wium., *The electronic broadsheet : all the news that fits the display*, Thesis Arch 1991 M.S.

Mok, Chee Kong., *Implicitly coded knowledge--content-based representations of image sequences*, Thesis Arch 1991 M.S.V.S.

Orwant, Jon, *Doppelgänger--a user modeling system*, Thesis E.E. 1991 B.S.


Mollitor, Robert Charles., *Eloquent scenery--a study of peripheral visual communication*, Thesis Media Arts and Science 1993 M.S.


Wachman, Joel., *Using head position to enhance human interfaces*, Thesis Arch 1990 M.S.


Bartol, Kris, Thesis E.E. 1989 B.S.


Linhardt, Paul Michael., *Integration of range images from multiple viewpoints into a particle database*, Thesis Arch 1989 M.S.V.S.


Thompson, John Henry, Thesis E.E. 1983 B.S.

**Thesis Reader**

Perry, Ethan Lewis, *Anthropomorphic visualization: depicting participants in online spaces using the human form*, Thesis Media Arts and Science 2004 S.M.

Dai, James Jian, *Visual intelligence for online communities commonsense image retrieval by query expansion*, Thesis Media Arts and Science 2004 S.M.

Hadis, Martin, *From generation to generation: family stories, computers and genealogy*, Thesis Media Arts and Science 2004 S.M.

Sparacino, Flavia, *Sto(ry)chastics: a Bayesian network architecture for combined user modeling, sensor fusion, and computational storytelling for interactive spaces*, Thesis Media Arts and Science 2002 Ph.D.

Frost, Jeana, *Visualizing health: imagery as data for changing personal practice*, Thesis Media Arts and Science 2001 S.M.

Sack, Warren, *Design for very large-scale conversations*, Thesis Media Arts and Science 2000 Ph.D.

Lackner, Tamara, *Enhancing Children's Educational Television with Design Rationales and Justifications*, Thesis Media Arts and Science 2000 S.M.

Rhodes, Bradley James, *Just-In-Time Information Retrieval*, Thesis Media Arts and Science 2000 Ph.D.

Wexelblat, Alan, *Footprints: interaction history for digital objects*, Thesis Media Arts and Science 1999 Ph.D.

Pan, Pengkai, *I-Views: a storymaking community of, by and for the audience*, Thesis Media Arts and Science 1999 S.M.

Dakss, Jonathan, *HyperActive: an automated tool for creating hyperlinked video*, Thesis Media Arts and Science 1999 S.M.

Emnett, Keith Jeffrey, *Synthetic News Radio: Content Filtering and Delivery for Broadcast Audio News*, Thesis Media Arts and Science 1999 S.M.

Ivanov, Yuri A., *Application of stochastic grammars to understanding action*, Thesis Media Arts and Science 1998 S.M.

Evard, Michele, *Twenty heads are better than one: communities of children as virtual experts*, Thesis Media Arts and Science 1998 S.M.

Verplaetse, Christopher James, *Inertial-Optical Motion-Estimating Camera for Electronic Cinematography*, Thesis Media Arts and Science 1997 S.M.

Metral, Max, *MotorMouth--a generic engine for large-scale, real-time automated collaborative filtering*, Thesis Media Arts and Science 1995 S.M.