

## Joseph A. Konstan

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### *Curriculum Vitae*

#### Education

Ph.D. in Computer Science	University of California, Berkeley	1993
M.S. in Computer Science	University of California, Berkeley	1990
A.B. in Computer Science	Harvard University	1987

#### Professional Experience

Associate Department Head	University of Minnesota	2008-
Professor (with tenure)	University of Minnesota	2005-
Also appointed as Adjunct Professor of Epidemiology and Community Health		2007
Associate Professor (with tenure)	University of Minnesota	1999-2005
Assistant Professor	University of Minnesota	1993-1999
Consulting Scientist	Net Perceptions, Inc.	1996-2000
Instructor	University of Minnesota	1992-1993
Research Assistant	University of California, Berkeley	1988-1992
Teaching Assistant	University of California, Berkeley	1988-1992
Instructor	Harvard Summer School	1987-1988
Teaching Assistant	Harvard University	1985-1987

#### Affiliations and Offices

Member ACM Executive Committee (7/06 – 6/08) and ACM Council (7/06 – 6/08)  
Chair of the ACM SIG Governing Board (7/06 – 6/08)  
Member of the ACM SIG Governing Board Executive Committee (8/04 – 6/10)  
President of ACM SIGCHI (7/03 – 6/06)  
Member of the SIGCHI Executive Committee (7/99 – 6/09)  
Member of the SIGMM Executive Committee (11/99 - present)  
Vice-Chair for Operations of the ACM SIG Governing Board (8/04 – 6/06), member of SGB 7/03 – 6/06.  
Vice-Chair of the ACM Membership Services Board (10/04 – 6/06), member (5/04 – 6/06).  
Vice-Chair of the Federal Demonstration Partnership (and elected Faculty Representative) (1/05 – 1/07).  
Member of ACM (Distinguished Scientist), ACM SIGCHI, and ACM SIGMM (Multimedia)  
Senior Member of IEEE, IEEE Computer Society  
President (10/98 - 7/99), Treasurer (12/97 - 10/98), and co-Founder of TwinCHI -- Twin Cities chapter of SIGCHI

#### Research Interests

Human-computer interaction, collaborative information filtering, online communities, medical and health applications of Internet technology, multimedia systems, scientific visualization, interface toolkits and frameworks.

#### Awards & Honors

ACM Distinguished Scientist	2006
IEEE Senior Member	2006
Best Student Paper (advisees), User Modeling 2003	2003
IEEE Distinguished Visitor	2003-2005
George Taylor Career Development Award	1999
National Science Foundation CAREER Grant	1998-2003
ACM Distinguished Lecturer	1997-2006
Best Paper. Usenix Tcl/Tk Workshop	1996

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National Science Foundation Research Initiation Award	1994-1998
Best Experience Paper, OOPSLA '91	1991
Bush Foundation Advanced Seminar on Teaching Excellence	1995
President's Distinguished Faculty Mentor	1994-1997
Bush Foundation Project for Teaching Excellence	1993-1994
Outstanding Graduate Student Instructor Award	1992
Demitri Angelakos Award (service to department)	1991
National Defense Science & Engineering Graduate Fellowship	1989-1992
California Fellowship in Microelectronics	1987-1988

## **Interdisciplinary Affiliations**

Adjunct Professor of Epidemiology and Community Health, U of M School of Public Health (since 2007)  
 Affiliate Member of the Graduate Faculty of Rhetoric (since 2007)  
 Member of Graduate Faculties of Human Factors, Software Engineering (Director of Graduate Studies, 1999-2001)  
 Member of Center for Cognitive Sciences, Internet Studies Center

## **Professional Activities**

### Offices and Editorial Boards

Chair, ACM SIG Governing Board (7/06 – 6/08)  
 Member ACM Executive Committee and ACM Council (7/06 – 6/08)  
 Member ACM Task Force on ACM-W (10/06 – 6/07)  
 President of ACM SIGCHI (5000-member professional society in human-computer interaction) (7/2003 – 6/2006)  
 Vice-Chair for Operations of the ACM SIG Governing Board (8/04 – 6/06), member of SGB since 7/03.  
 Vice-Chair of the ACM Membership Services Board (10/04 – 6/06), member since 5/04.  
 Vice-Chair of the Federal Demonstration Partnership (and elected Faculty Representative) (1/05 – 1/07).  
 Editor of *SIGCHI Bulletin* (7/99 – 6/03)  
 Member of Editorial Board of the *International Journal of Human-Computer Interaction* (since January 2008)  
 Member of Editorial Board of the journal *User Modeling and User Adapted Interaction* (since January 2002)  
 Member of Editorial Board of ACM/Springer Verlag journal *Multimedia Systems* (2001-2004))  
 Member of Editorial Board of the *Journal of Computer-Mediated Communication* (1996-2003).

### Conference Committees

Conference Chair, ACM Conference on Recommender Systems 2007  
 Conference Chair, UIST 2003  
 Conference Chair, Information, Technology and Everyday Life (U of M President's 21<sup>st</sup> Century Interdisciplinary Conference), May 2005  
 Workshops co-Chair, ACM Recommender Systems 2009  
 Doctoral Consortium co-Chair, CHI 2008  
 Doctoral Symposium co-Chair, ACM Recommender Systems 2008  
 Short-Papers co-Chair, CSCW 2002  
 Local Activities Chair, CHI 2002  
 Organizing Committee, Internet Research 2001 (Association of Internet Researchers)  
 Short Papers Associate Chair, CHI 2000  
 Panels Chair, UIST '99.  
 Technical Demonstrations Chair, ACM Multimedia '99.  
 Dissertation Symposium Chair, ACM Multimedia '99.  
 Exhibits co-Chair for CHI '96.

### Program Committees

First and Seventeenth International Conference on User Modeling, Adaptation, and Personalization (UMAP 2009)  
 WWW 2009 (18<sup>th</sup> International World Wide Web Conference)  
 ACM Recommender Systems 2008

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NordiCHI 2008  
ECAI 2008 Workshop on Recommender Systems  
Adaptive Hypermedia and Adaptive Web-Based Systems 2008  
HCI Educators Conference 2007  
User Modeling 2007  
AAAI 2007 Workshop on Recommender Systems  
Social Navigation and Community-Based Adaptation Technologies Workshop at Adaptive Hypermedia 2006  
WWW 2006 (15<sup>th</sup> International World Wide Web Conference)  
Beyond Personalization Workshop at IUI 2005 (co-chair)  
User Modeling 2005 (10<sup>th</sup> International Conference on User Modeling)  
NordiCHI 2004, 2006, 2008  
CHI 2004 (Associate Chair)  
IEEE International Conference on Data Mining 2003  
Interact 2003  
7<sup>th</sup> International Conference on Information Visualisation (2003)  
UIST 2005, 2003, 2000, and 1999  
ACM Conference on Universal Usability 2000 (Associate Chair)  
ACM Multimedia 2000 (program co-Chair), '99 and '98 (Associate Chair)  
International Conference on Autonomous Agents 2000.  
CHI 2000 Workshop on Social Navigation  
CHI Basic Research Symposium (co-Chair 1998; member 1999, 1997, 1996)  
ACM Symposium on Intelligent User Interfaces (IUI) 99.  
Recommender systems workshops, 1998 (AAAI) and 1999 (CHI and SIGIR).  
Usenix Tcl/Tk Workshop 1997 (co-Chair 1997; member 1996).  
CHI Paper Review Committee (CHI '95, CHI 96, CHI 97, CHI 98, CHI 99, CHI 2000, CHI 2001, CHI 2002, CHI 2003, CHI 2005, CHI 2006, CHI 2007, and CHI 2008).

### Guest Editorships

Guest co-editor for special issue of *AI Communications* (Vol. 21, Issue 2-3, April 2008) in Recommender Systems).  
Guest editor for January 2004 special issue of *ACM Transactions on Information Systems* on Recommender Systems: Algorithms and Evaluation.  
Guest editor of December 1996 issue of *JCMC* on Communication in Information Spaces.

### Other Reviewing

Referee for *ACM Transactions on Programming Languages and Systems*, *ACM Transactions on Software Engineering*, *IEEE Computer*, *Communications of the ACM*, *ACM Transactions on Computer-Human Interaction*, *ACM Multimedia Systems*, *ACM Transactions on Information Systems*, *User Modeling and User Adapted Interaction*, *ACM Transaction on Internet Technology*, *AI Communications*, *International Journal of Human Computer Interaction*, and various other journals.  
Reviewer for Clearway Minnesota (Minnesota QuitPlan Proposals) 2008.  
Reviewer for NSF proposals (1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2008).  
Reviewer for many conferences.

### National and International Working Groups

Member of IFIP WG 13.1 on Education in HCI and HCI Curricula, since 2001.

### **Journal and Serial Papers**

C-N. Ziegler, G. Lausen, and J.A. Konstan. "On Exploiting Classification Taxonomies in Recommender Systems," *AI Communications* 21(2-3) pp. 97-125, 2008.  
B.R.S. Rosser, M.H. Miner W.O. Bockting, M.W. Ross, J.A. Konstan, L. Gurak, J. Stanton, A. Carballo-Diéguez, R. Mazin, E. Coleman. "HIV Risk : Results of the Men's INternet Study (MINTS)." *AIDS & Behavior*, in press (published online May 2008).  
W. Pequegnat, B.R.S. Rosser, A. Bowen, S.S. Bull, R.J. DiClemente, W.O. Bockting, J. Elford, M. Fishbein, L. Gurak, K. Horvath, J. Konstan, S. Noar, M.W. Ross, L. Sherr, D. Spiegel, R. Zimmerman. "Conducting Internet-based HIV/STD Prevention Survey Research: Considerations in Design and Evaluation." *AIDS & Behavior* 11,4 July 2007, pp. 505-521. ( published online October 2006).

Last updated: 12/08

- B.P. Bailey and J.A. Konstan. "On the Need for Attention-Aware Systems: Measuring Effects of Interruption on Task Performance, Error Rate, and Affective State." *Journal of Computers in Human Behavior* 22, 4, July 2006, pp. 685-708.
- N. Good, J. Grossklags, J.A. Konstan, D. Mulligan, A. Perzanowski, D. Thaw.) "User Choices and Regret: Understanding Users' Decision Process about Consensually Acquired Spyware." *IS: A Journal of Law and Policy for the information Society* 2, 2, 2006.
- J.A. Konstan, B.R.S. Rosser, M.W. Ross, J. Stanton, and W.M. Edwards. "The Story of Subject Naught: A Cautionary but Optimistic Tale of Internet Survey Research," *Journal of Computer-Mediated Communication* 10(2), January 2005.
- J.B. Schafer, J.A. Konstan, and J. Riedl. "The View through MetaLens: Usage Patterns for a Meta-Recommendation System," *IEE Proceedings Software*, Vol. 151, No. 6, December 2004, pp 267-279. IEE Publishing.
- M. Ross, B.R.S. Rosser, J. Stanton, and J. Konstan. "Characteristics of Latino men who have sex with men on the Internet who complete and drop out of an Internet-based sexual behavior survey," *AIDS Education and Prevention* 16(6), December 2004, pp. 526-537.
- B. Miller, J. Konstan, L. Terveen and J. Riedl. "PocketLens: Towards a Personal Recommender System" *ACM Transactions on Information Systems* 22(3), pp. 437-476, July 2004.
- J. Herlocker, J. Konstan, L. Terveen and J. Riedl. "Evaluating Collaborative Filtering Recommender Systems" *ACM Transactions on Information Systems* 22(1), pp. 5-53, January 2004.
- B. Bailey and J. Konstan. "Are Informal Tools Better? Comparing DEMAIS, Pencil and Paper, and Authorware for Early Multimedia Design." *CHI Letters* 5(1), CHI 2003, ACM Conference on Human Factors in Computing Systems. (16% acceptance rate)
- D. Cosley\*, S.K. Lam\*, I. Albert, J. Konstan, and J. Riedl. "Is Seeing Believing? How Recommender System Interfaces Affect Users' Opinions." *CHI Letters* 5(1), CHI 2003, ACM Conference on Human Factors in Computing Systems. (16% acceptance rate)
- J. Herlocker, J. Konstan, and J. Riedl. Empirical Analysis of Design Choices in Neighborhood-based Collaborative Filtering Algorithms. *Information Retrieval* 5 287-310, 2002.
- S. McNee\*, Istvan Albert, Dan Cosley\*, Prateep Gopalkrishnan\*, Shyong K. Lam\*, Al Mamunur Rashid\*, Joseph A. Konstan, and John Riedl. "On the Recommendation of Citations for Research Papers." *CHI Letters* 4(3), CSCW 2002, ACM Conference on Computer-Supported Cooperative Work. (acceptance rate: 20%)
- J. Herlocker and J. Konstan. "Content-Independent, Task-Focused Recommendations." *IEEE Internet Computing* 5(6) Nov-Dec 2001, pp. 40-47.
- J.B. Schafer\*, J. Konstan, and J. Riedl. "Electronic Commerce Recommender Applications." *Data Mining and Knowledge Discovery*. Kluwer Academic Publishers. January 2001. Also appears as a chapter in R. Kohavi and F. Provost (eds.) *Applications of Data Mining to Electronic Commerce*. Kluwer Academic Publishers, February 2001.
- J. Herlocker\*, J. Konstan, and J. Riedl. "Explaining Collaborative Filtering Recommendations." *CHI Letters* 2(3), CSCW 2000, ACM Conference on Computer Supported Cooperative Work." (acceptance rate: 18%)
- I. Kazi\*, D. Jose\*, B. Ben-Hamida\*, C. Kwok\*, C. Hescott\*, J. Konstan, D. Lilja, and P-C. Yew. "JaViz: A Client/Server Java Profiling Tool," *IBM Systems Journal* 31:1, 2000.
- E. Chi\*, P. Barry. J. Riedl, and J. Konstan. "Principles for Information Visualization Spreadsheets," *IEEE Computer Graphics & Applications*, July 1998, pp. 30-38.
- J. Konstan, L. Lichtblau, P. Sturm\*, and J. McLeod\*. "ISAP: A Web-Based Pharmacology Course and Study Environment," *Computers and Education* special issue on Multimedia, December 1997, pp. 63-71.
- J. Konstan, B. Miller\*, D. Maltz\*, J. Herlocker\*, L. Gordon\*, and J. Riedl. "Applying Collaborative Filtering to Usenet News: The GroupLens System," *Communications of the ACM*, March 1997, pp. 77-87.
- J. Schnepf\*, J. Konstan, and D. Du. "Doing FLIPS: Flexible Interactive Presentation Synchronization," *IEEE Journal on Selected Areas in Communication*, January 1996, pp. 114-125. (an earlier version appeared in the 1995 IEEE Multimedia Conference)
- J. Konstan. "State Problems in Programming Human-Controlled Devices," *IEEE Transactions on Consumer Electronics*, November 1994, pp. 812-820.

## Books

- J. Riedl and J. Konstan. *Word of Mouse: The Marketing Power of Collaborative Filtering*. New York: Warner Books, 2002.

## United States Patents

- U.S. Patent #6,496,832. Visualization Spreadsheet (with E. Chi, J. Riedl, P. Barry). Issued December 17, 2002.
- U.S. Patent #6,412,012. System, method, and article of manufacture for making a compatibility-aware recommendations to a user (with P. Bieganski, J. Rauser, and D. Frankowski). Issued June 25, 2002.
- U.S. Patent #6,334,127. System, method and article of manufacture for making serendipity-weighted recommendations to a user (with P. Bieganski and J. Riedl). Issued December 25, 2001.
- U.S. Patent #6,108,493. System, Method, and Article of Manufacture for Utilizing Implicit Ratings in Collaborative Filters (with B. Miller and J. Riedl). Issued August 22, 2000.
- U.S. Patent # 6,016,475. System, Method, and Article of Manufacture for Generating Implicit Ratings Based on Receiver Operating Curves (with B. Miller and J. Riedl). Issued January 18, 2000.

U.S. Patent #5,842,199. System, Method, and Article of Manufacture for Using Receiver Operating Curves to Evaluate Predictive Utility (with B. Miller and J. Riedl). Issued November 24, 1998.

## Highly Selective Peer-Reviewed Conference Papers

F.M. Harper\*, D. Raban, S. Rafaeli, and J.A. Konstan. "Predictors of Answer Quality in Online Q&A Sites" to appear in *Proceedings of CHI 2008* (acceptance rate: 22%)

N. Kapoor\*, J.T. Butler, G.C. Fouty, J.A. Stemper, and J.A. Konstan. "A Study of Citations in Users' Online Personal Collections" In *Proceedings of the 2007 European Conference on Research and Advanced Technology for Digital Libraries (ECDL 2007)*. (acceptance rate: 30%).

N. Good\*, J. Grossklags\*, D. Mulligan, and J.A. Konstan. "Noticing Notice: A large-scale experiment on the timing of software license agreements" *Proceedings of CHI 2007*. (acceptance rate: 24%)

J.D. Weisz\*, S. Kiesler, H. Zhang, Y. Ren, R.E. Kraut, and J.A. Konstan. "Watching Together: Integrating Text Chat with Video" *Proceedings of CHI 2007*. (acceptance rate: 24%)

S.M. McNee\*, N. Kapoor\*, and J.A. Konstan. "Don't Look Stupid: Avoiding Pitfalls when Recommending Research Papers" *Proceedings of CSCW 2006*. (acceptance rate: 22%)

F.M. Harper\*, X. Li\*, Y. Chen, and J.A. Konstan. "An Economic Model of User Rating in an Online Recommender System," *Proceedings of 10th International Conference on User Modeling (UM'2005)*, July 2005. (acceptance rate: 21%)

C-N. Ziegler\*, S. McNee\*, J.A. Konstan, and G. Lausen. "Improving Recommendation Lists Through Topic Diversification," *Proceedings of the 14th International World Wide Web Conference (WWW 2005)*, May 2005. (acceptance rate: 14%)

R. Torres\*, S. McNee\*, M. Abel, J. Konstan, and J. Riedl. "Enhancing Digital Libraries with TechLens+," *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries 2004*. (acceptance rate: 30%)

B. Miller\*, I. Albert, S.K. Lam\*, J. Konstan, and J. Riedl. MovieLens Unplugged: Experiences with a Recommender System on Four Mobile Devices, *Proceedings of the 17th Annual Human-Computer Interaction Conference (HCI 2003)*, British HCI Group, September 2003. (acceptance rate: <30%)

S.M. McNee\*, S.K. Lam\*, C. Guetzlaff\*, J.A. Konstan, and J. Riedl. Confidence Displays and Training in Recommender Systems. *Proceedings of INTERACT '03 IFIP TC13 International Conference on Human-Computer Interaction*, September, 2003, pp. 176-183. (acceptance rate 34%)

S.M. McNee\*, S.K. Lam\*, J.A. Konstan, and J. Riedl. Interfaces for Eliciting New User Preferences in Recommender Systems. *Proceedings of The 9th International Conference on User Modeling (UM'2003)*, LNAI 2702, June 2003, pp. 178-188. (acceptance rate: 25%) **Winner of best student paper award.**

J.B. Schafer, J.A. Konstan, and J. Riedl. "Meta-recommendation Systems: User-controlled Integration of Diverse Recommendations." *Proceedings of the 11th International Conference on Information and Knowledge Management*, McLean, VA, November 2002, pp. 43-51. (acceptance rate: 25%)

A.M. Rashid\*, I. Albert, D. Cosley\*, S.K. Lam\*, S. McNee\*, J.A. Konstan, & J. Riedl. "Getting to Know You: Learning New User Preferences in Recommender Systems." *Proceedings of the 2002 International Conference on Intelligent User Interfaces*, San Francisco, CA, January 2002, pp. 127-134. (acceptance rate: 30%)

B. Bailey\*, J. Konstan, and J. Carlis. "DEMAIS: Designing Multimedia Applications with Interactive Storyboards." *Proceedings ACM Multimedia 2001*. (acceptance rate: 17%)

M. O'Connor\*, D. Cosley\*, J. Konstan, and J. Riedl. "PolyLens: A Recommender System for Groups of Users." *Proceedings of the European Conference on Computer-Supported Cooperative Work 2001*. (acceptance rate: 19%)

B. M. Sarwar\*, G. Karypis, J. A. Konstan, and J. Riedl. "Item-based collaborative filtering recommendation algorithms." *Proceedings of the 10th International World Wide Web Conference (WWW10)*, Hong Kong, May 2001. (acceptance rate: 20%)

B. Bailey\*, J. Konstan, and J. Carlis. "The Effects of Interruptions on Task Performance, Annoyance, and Anxiety in the User Interface." *Proceedings of INTERACT 2001*. (acceptance rate: 33%)

B. Sarwar\*, G. Karypis, J. Konstan, and J. Riedl. "Analysis of Recommender Algorithms for E-Commerce," *Proceedings of the ACM Conference on Electronic Commerce (EC 2000)*. (acceptance rate: 18%)

J.B. Schafer\*, J. Konstan, and J. Riedl. "Recommender Systems in E-Commerce," *Proceedings of the ACM Conference on Electronic Commerce (EC '99)*. (acceptance rate: <30%)

J. Herlocker\*, J. Konstan, A. Borchers, and J. Riedl. "An Algorithmic Framework for Performing Collaborative Filtering," *Proceedings of the ACM Conference on Research and Development in Information Retrieval (SIGIR '99)*. (acceptance rate: 25%)

N. Good\*, J.B. Schafer\*, J. Konstan, A. Borchers, B. Sarwar\*, J. Herlocker\*, and J. Riedl. "Combining Collaborative Filtering with Personal Agents for Better Recommendations," *Proceedings of AAAI-99*, AAAI Press. (acceptance rate: 25%)

J. Carlis and J. Konstan. "Interactive Visualization of Serial Periodic Data," *Proceedings of ACM UIST 98*, San Francisco, November 1998, pp. 29-38. (acceptance rate: 25%)

B. Sarwar\*, J. Konstan, A. Borchers, J. Herlocker\*, B. Miller\*, and J. Riedl. "Using Filtering Agents to Improve Prediction Quality in the GroupLens Research Collaborative Filtering System," *Proceedings of ACM CSCW '98*, Seattle, November 1998, pp. 345-354. (acceptance rate: 19%)

Last updated: 12/08

- B. Bailey\*, J. Konstan, R. Cooley\*, and M. Dejong\*. "Nsync - A Toolkit for Building Interactive Multimedia Presentations," *Proceedings of ACM Multimedia '98*, Bristol, UK, September 1998, pp. 257-266. (acceptance rate for full papers: 17%) Also appears in *Readings in Multimedia Computing and Networking* (K. Jeffay and H. Zhang, eds.) Morgan-Kaufmann, 2001, pp. 761-770.
- T. Gustafson\*, J.B. Schafer\*, and J. Konstan. "Agents in Their Midst: Evaluating User Adaptation to Agent-Assisted Interfaces," *Proceedings of the 1998 International Conference on Intelligent User Interfaces*, San Francisco: ACM, January 1998, pp. 163-170. (acceptance rate: 35%)
- B. Miller\*, J. Riedl, and J. Konstan. "Experiences with GroupLens: Making Usenet Useful Again," *Proceedings of the Usenix 1997 Winter Technical Conference*, Anaheim, CA, January 1997, pp. 219-233. (acceptance rate: 31%)
- J. Herlocker\* and J. Konstan. "Commands as Media: Design and Implementation of a Command Stream," *Proceedings of ACM Multimedia '95*, pp. 155-165. (acceptance rate: 22%)
- L. Rowe, J. Konstan\* and B. Smith\*. "The Picasso Application Framework," *Proceedings of ACM UIST '91*, Hilton Head, SC, November 1991, pp. 95-105. (acceptance rate: 23%)
- J. Konstan\* and L. Rowe. "Developing a GUIDE Using Object-Oriented Programming," *Proceedings of the Sixth ACM Conference on Object-Oriented Programming: Systems, Languages, and Applications*, Phoenix, AZ, October 1991, pp. 75-88. (paper won best experience paper award) (acceptance rate: 12%)

## Articles and Chapters

- J.A. Konstan, B.R.S. Rosser, K.J. Horvath, L. Gurak, and W. Edwards. "Protecting Subject Data Privacy in Internet-Based HIV/STI Prevention Survey Research." In F.G. Conrad and M.F. Schober (Eds) *Envisioning the Survey Interview of the Future*. Wiley and Sons, 2007.
- J.A. Konstan. "Drawing on SketchPad: Reflections on Computer Science and HCI." In T. Erickson and D.W. McDonald (Eds.) *HCI Remixed: Essays on Works that have Influenced the HCI Community*. MIT Press, 2007.
- J.A. Konstan. "The Case for Direct-Charged Research Project Management Assistance." Federal Demonstration Project White Paper. December, 2007.
- R.S. Decker, L. Wimsatt, A.G. Trice, and J.A. Konstan. "A Profile of Federal-Grant Administrative Burden among Federal Demonstration Partnership Faculty." January 2007. Report available at [www.thefdp.org](http://www.thefdp.org).
- J.B. Schafer, J. Konstan, and J. Riedl. "Recommender Systems for the Web." In *Visualizing the Semantic Web*, 2<sup>nd</sup> Edition, edited by V. Geroimenko and C. Chen. Springer Verlag, 2006. Substantial revision and extension of first-edition chapter.
- J. Konstan and J. Riedl. "Collaborative Filtering: Supporting Social Navigation in Large, Crowded Infospaces." In *Designing Information Spaces: The Social Navigation Approach* edited by K. Höök, D. Benyon, and A.J. Munro. Springer Verlag, 2002.
- J. Konstan and J. Riedl. "Recommender Systems for the Web." In *Visualizing the Semantic Web*, edited by V. Geroimenko and C. Chen. Springer Verlag, 2002.
- B. Bailey\*, L. Gurak, and J.A. Konstan. "Trust in Cyberspace." In *Human Factors and Web Development*, edited by J. Ratner. New Jersey: Lawrence Erlbaum Associates, 2002.
- B. Miller\*, J. Riedl, and J. Konstan. "GroupLens for Usenet: Experiences in Applying Collaborative Filtering to a Social Information System" in C. Leug and D. Fisher (eds.) *From Usenet to CoWebs: Interacting with Social Information Spaces*. Springer-Verlag, 2002 (in press).
- B. Sarwar\*, J. Konstan, and J. Riedl. "Distributed Recommender Systems: New Opportunities for Internet Commerce," in *Internet Commerce and Software Agents: Cases, Technologies and Opportunities* (S. Rahman and R. Bignall, eds.). Idea Group Publishing, Hershey, PA, 2001.
- B. Bailey\* and J. Konstan "Authoring Interactive Media." Article in *Encyclopedia of Electrical and Electronics Engineering*. John Wiley & Sons, 2000.
- J. Konstan. "Web Resources" encyclopedia article in *1999 Yearbook of Science & Technology*. McGraw Hill, New York, 1999.
- A. Borchers, J. Herlocker\*, J. Konstan, and J. Riedl. "Ganging Up on Information Overload," column in *IEEE Computer*, April 1998, pp. 106-108.
- S. Rafaeli, F. Sudweeks\*, J. Konstan, and E. Mabry. "ProjectH: A Collaborative Quantitative Study of Computer-Mediated Communication," in *Network & NetPlay: Virtual Groups on the Internet* (F. Sudweeks, M. McLaughlin, and S. Rafaeli, editors). Cambridge, MA: AAAI Press and MIT Press, 1998, pp. 265-281.

## Other Peer-Reviewed Full-Length Conference Papers

- V. Krishnan\*, P.K. Narayanashetty\*, M. Nathan\*, R.T. Davies, and J.A. Konstan. "Who predicts better?: results from an online study comparing humans and an online recommender system." In *Proceedings of the 2008 ACM Conference on Recommender Systems* (Lausanne, Switzerland, October 23 - 25, 2008). RecSys '08. ACM, New York, NY, 211-218.
- F.M. Harper\*, X. Li, Y. Chen, and J.A. Konstan. "Social Comparisons to Motivate Contributions to an Online Community" *Proceedings of Persuasive 2007* (approx. acceptance rate: 44%).
- N. Kapoor\*, J.T. Butler, G.C. Fouty, J.A. Stemper, and J.A. Konstan.. "Resolvability of References in Users' Personal Collections" In *Proceedings of the Sixth International Conference on Conceptions of Library and Information Sciences (CoLIS 2007)*.

- N. Kapoor, D. Frankowski, L. Terveen, and J. Konstan. "Lessons Learned in Implementing the CHIplace Online Community" *Proceedings of the Human-Computer Interaction International Conference 2005*. (invited and reviewed)
- B.M. Sarwar, G. Karypis, J. Konstan, and J. Riedl. "Recommender Systems for Large-Scale E-Commerce: Scalable Neighborhood Formation Using Clustering." *Proceedings of the Fifth International Conference on Computer and Information Technology*, 2002. (acceptance rate: 54%)
- B.M. Sarwar, G. Karypis, J. Konstan, and J. Riedl. "Incremental SVD-Based Algorithms for Highly Scaleable Recommender Systems." *Proceedings of the Fifth International Conference on Computer and Information Technology*, 2002. (acceptance rate: 54%)
- B. Bailey\*, J. Konstan, and J. Carlis. "Supporting Multimedia Designers: Towards More Effective Design Tools." *Proceedings Multimedia Modeling, 2001*. (acceptance rate: 54%)
- A. Safonov\*, J. Konstan, and J. Carlis. "End-user Web Automation: Challenges, Experiences, Recommendations." *Proceedings of WebNet 2001*. (acceptance rate: unknown)
- B. Bailey\*, J. Konstan, and J. Carlis. "An Examination of Trust Production in Computer-Mediated Exchange." *Proceedings of the 7th Conference on Human Factors and the Web*, 2001. (acceptance rate: 33%)
- A. Safonov\*, J. Konstan, and J. Carlis. "Beyond Hard-to-Reach Pages: Interactive, Parametric Web Macros." *Proceedings of the 7th Conference on Human Factors and the Web*, 2001. (acceptance rate: 33%)
- B. Bailey\*, J. Konstan, and J. Carlis. "Adjusting Windows - Balancing Information Awareness with Intrusion," *Proceedings of the Sixth Conference on Human Factors and the Web*, 2000. (acceptance rate: 42%)
- B. Sarwar\*, G. Karypis, J. Konstan, and J. Riedl. "Application of Dimensionality Reduction in Recommender System--A Case Study." *Proceedings of the WebKDD 2000 Workshop*, August 2000. (acceptance rate: 41%)
- A. Safonov\*, J. Konstan, and J. Carlis. "Toward Web Macros: A Model and a Prototype System for Automating Common Tasks on the Web," *Proceedings of the Fifth Conference on Human Factors and the Web*, June 1999. (acceptance rate: 40%)
- M. DeJong\*, B. Bailey\*, and J. Konstan. "Creating A Multimedia Extension for Tcl Using the Java Media Framework," *Proceedings of the 1998 Tcl/Tk Conference*, Usenix Association, San Diego, September 1998, pp. 155-162. (acceptance rate: 59%)
- E. Chi\*, P. Barry, J. Riedl, and J. Konstan. "A Spreadsheet Approach to Information Visualization," in *Proceedings of the 1997 IEEE Symposium on Information Visualization*, October 1997, pp. 17-24 and 116. (acceptance rate: 59%)
- A. Safonov\*, J. Konstan, J. Carlis, and B. Bailey\*. "Extending Traces with OAT: An Object Attribute Trace Package for Tcl/Tk," *Proceedings of the Tcl/Tk Workshop 97*, Usenix Association, July 1997, pp. 81-88. (acceptance rate: 50%)
- B. Bailey\* and J. Konstan. "Nsync -- A Constraint-Based Toolkit for Multimedia," *Proceedings of the Tcl/Tk Workshop 97*, Usenix Association, July 1997, pp. 107-114. (acceptance rate: 50%)
- J. Konstan, S. Herbst\*, and A. Ellis. "Web-Based Delivery and Open-Architecture Database Support in the ITreS Counselor Information System," Special Issue of *Journal of the American Medical Informatics Association -- Proceedings of the AMIA Fall Symposium*, 1996, pp. 782-786. (acceptance rate: 55%)
- A. Safonov\*, D. Perrin\*, J. Konstan, and J. Carlis. "Lessons from the Neighborhood Viewer: Building Innovative Collaborative Applications in Tcl and Tk," *Proceedings of the Tcl/Tk Workshop '96*, Usenix Association, 1996, pp. 203-213. (paper won best paper award) (acceptance rate: 57%)
- J. Herlocker\* and J. Konstan. "Tcl Commands as Media in a Distributed Multimedia Toolkit," *Proceedings of the Tcl/Tk Workshop 95*, Usenix Association, 1995, pp. 205-212. (acceptance rate: 79%)
- S. Iyengar\* and J. Konstan. "TclProp: A Data-Propagation Formula Manager for Tcl and Tk," *Proceedings of the Tcl/Tk Workshop 95*, Usenix Association, 1995, pp. 25-30. (acceptance rate: 79%)

\*student author

## Other Reviewed Publications

- B.R. Simon Rosser, Joseph Konstan, Richard Weinmeyer, Keith Horvath, Sonya Brady, Rhonda Jones-Webb, Lindsay Niswanger, Gabriel Anderson. "Investigating Structural Interventions to Lower Alcohol-related STI/HIV-risk (SILAS)." *Abstracts of the XVII International AIDS Conference*, Mexico City, 3-8 August 2008, Tuesday 5, 13702.
- J.A. Konstan and Y. Chen. "Online Field Experiments: Lessons from CommunityLab" in *Proceedings of the Third International Conference on e-Social Science*, Ann Arbor, MI, October 2007.
- J.A. Konstan, S.M. McNee, C-N. Ziegler, R. Torres, N. Kapoor, and J.T. Riedl. "Lessons on Applying Automated Recommender Systems to Information Seeking Tasks". Nectar paper in *the Proceedings of AAAI-06: the Twenty-First National Conference on Artificial Intelligence (AAAI-06)*, Boston MA, July 2006.
- J.A. Konstan, N. Kapoor, S.M. McNee, and J.T. Butler. TechLens: Exploring the Use of Recommenders to Support Users of Digital Libraries. CNI 2005 Fall Task Force Meeting Project Briefing. Coalition for Networked Information. Phoenix, AZ.
- B.R.S. Rosser, W.O. Bockting, L. Gurak, J. Konstan, M.W. Ross, E. Coleman, S. Jacoby. Sexual risk behavior and the Internet: Results of the Men's INternet Study (MINTS). *Abstracts of the 2005 National HIV Prevention Conference*, Atlanta, GA, July 12-15, 2005; #T1-A0804, p. 82.
- B.R.S. Rosser, C. Naumann, J. Konstan, S. Hooper, K. Feiner, W. Bockting, G. Remafedi, E. Coleman, M. Oakes, T. Manning, M. Allen. Next generation HIV prevention programs using the Internet: Men's INternet Study II (MINTS-II). *Abstracts of the 2005 National HIV*

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*Prevention Conference*, Atlanta, GA, July 12-15, 2005; #T2-C1501, p.112.

N. Kapoor, J.A. Konstan, and L.G. Terveen. How peer photos influence member participation in online communities. In *CHI '05 Extended Abstracts on Human Factors in Computing Systems* (Portland, OR, USA, April 02 - 07, 2005).

B. Miller\*, I. Albert, S. Lam\*, J. Konstan, and J. Riedl (poster paper) "MovieLens Unplugged: Experiences with a Recommender Systems on Four Mobile Devices." *Proceedings of the 2003 ACM Conference on Intelligent User Interfaces*, Miami, FL, January 2003.

A. Safonov\*, J. Konstan, and J. Carlis. (poster) "WebMacros - a Proxy-based System for Recording and Replaying User Interactions with the Web." *Poster Proceedings of the 10th International World Wide Web Conference*, 2001.

B. Bailey\*, J. Konstan, and J. Carlis. "Measuring the Effects of Interruptions on Task Performance in the User Interface," *Proceedings of the IEEE Conference on Systems, Man, and Cybernetics*, 2000.

J. Konstan. "Research Resources for Collaborative Filtering." Position paper for CHI 99 Workshop on Recommender Systems. Presented at the workshop in May 1999.

J. Konstan. "No Filter is an Island." Position paper for AAAI-98 Workshop on Recommender Systems. Presented at the workshop on July 26, 1998.

S. Larson and J. Konstan. "Collaborative Filtering's Impact on Relationship Marketing" column in *DM News*, November 24, 1997.

"A Spreadsheet Approach to Information Visualization" (with E. Chi, P. Barry, and J. Riedl). Peer-reviewed demonstration presented at the *10th Annual ACM Symposium on User Interface Software and Technology (UIST '97)*, Banff, AB, October, 1997. (Summary on page 79 of proceedings).

"The GroupLens Research Project: Exploring Collaborative Filtering" (with J. Riedl and B. Miller) (position paper) *CHI '97 Basic Research Symposium*.

"Creating Multimedia System Toolkits" (position paper) *CHI '97 Basic Research Symposium*.

"Teaching the Design of Interactive Systems" (position paper) 1997 TeaDIS Workshop.

"The Neighborhood Viewer: A Paradigm for Exploring Image Databases" (with J. Carlis, A. Safonov, and D. Perrin). Peer-reviewed demonstration presented at CHI 97; summary in the *CHI 97 Conference Companion*.

Refereed demonstration of GroupLens collaborative filtering toolkit and applications at CSCW 96 (with B. Miller and J. Riedl) (Cambridge, MA, November 1996).

Refereed demonstration of command stream and SynchMe synchronization toolkit at ACM Multimedia '96 (with B. Smith and L. Rowe) (Boston, MA, November 1996).

"Tcl and Tk in the Classroom: Lessons Learned" (panel and position paper) *Proceedings of the Tcl/Tk Workshop '95*, Usenix Association, 1995.

"Fulfilling the Promise of Multimedia: Intelligent and Usable Multimedia Applications" (position paper) CHI '95 Basic Research Symposium.

"State Problems in Programming Human-Controlled Devices" (extended abstract) *Proceedings of the International Conference on Consumer Electronics*, 1993.

"The Picasso Graphical User Interface Framework" (poster) 1991 Lisp Users and Vendors Conference.

## Software Systems and Other Publications

Editor's introduction to April 2008 special issue of *AI Communications* (with D. Jannach and M. Zanker).

SexPulse online intervention/education system for HIV prevention (randomized clinical trial held in 2008).

TechLens research paper recommender (versions 1 and 2).

Four years of editorial columns during my tenure as editor of *SIGCHI Bulletin* (approximately 20 editorials total).

CHIPlace community web site (taken over and re-developed during 2003; re-launched with entirely new code in 2003). A community web site for the HCI community with over 2000 members.

DEMAIS design tool for multimedia. Released for general use.

MovieLens data sets and DBLens research collaborative filtering toolkit. Released for research use (and currently used by researchers at several universities and research labs, including Carnegie Mellon University and U.C. Berkeley).

GroupLens collaborative filtering toolkit. Licensed by University of Minnesota to Net Perceptions, Inc., July 1996. Commercial version is currently the leading collaborative filtering recommendation engine, with over 50 customers, mostly Internet sites.

MovieLens web-based movie recommendation site. Launched Fall 1997. Research system used to gather data and carry out experiments. Operates continuously with over 7000 users worldwide.

URL: <http://movielens.umn.edu/>

ISAP pharmacology education web site. Launched Spring 1996. As of July 1998, over 6800 registered users. Licensed to IdeaServices for commercial development in August 1998.

URL: <http://www.med.umn.edu/ISAP/>

TclProp data propagation constraint programming software releases. TclProp 1.0 and TkVP (video poker demonstration application) released August 1995. TclProp 1.1 released as part of Berkeley CMT distribution in November 1996. TclProp 2.0 and OAT (trace interface layer) released January 1997. Over 50 direct downloads.

*An Event-Based Architecture for Graphical User-Interface Toolkits*, Ph.D. Dissertation, University of California, Berkeley, 1993.

Berkeley IC-CIM Research (videotape), with L.A. Rowe, C. Hegarty, Y. Or, P. Schank, B. C. Smith, and S. Smoot. University of California, Berkeley, 1991.

Picasso Graphical User Interface Toolkit and Framework (software system) and accompanying *Picasso Reference Manual*, with L.A. Rowe, B.C. Smith, S. Seitz, C. Liu, and P. Schank. University of California, Berkeley, 1990.

## Research Grants

### Pending

#### **HCC-Small: Understanding and Supporting Online Question-Answering Sites (PI)**

PENDING

National Science Foundation

\$445,519 for the period 7/1/2008 to 6/30/2011

#### **HCC-Large: Collaborative Research: Understanding Online Volunteer Communities: Toward Theory-Based Design (Co-PI)**

PENDING

National Science Foundation

\$2,400,000 for the period 6/1/2008 to 5/31/2013

### Awarded: Federal Agencies

#### **National Science Foundation**

HCC-Small: Understanding and Supporting Online Question-Answering Sites" (PI, with J. Logie). Funded for \$445,519 for the period September 2008 – August 2011.

HCC-Large: Collaborative Research: Understanding Online Volunteer Communities: Toward Theory-Based Design" (co-PI, with J. Riedl, M. Snyder, L. Terveen, Y. Ren). Funded for \$2,400,000 for the period August 2008 – July 2013.

"IIS Workshop: Human-Computer Interaction Doctoral Research Consortium at ACM CHI 2008: Human Factor in Computing Systems" (PI). Funded for \$40,000 for the period August 2007 – July 2008.

"Recommender Systems Conference Doctoral Consortium 2007" (co-PI, with L. Terveen) Funded for \$15,415 for the period June 2007 – May 2008.

\$9000 supplement awarded to fund 2007 consortium.

"Enhanced Digital Libraries through Recommendation: Exploring the Use of Citations, Personal Bibliographies, and Metadata to Synthesize Library Services for Individuals" (PI, with J. Riedl and J. Butler). Funded for \$500,000 for the period June 2006-May 2009.

"Helping Hands: Computer Support for Community-Maintained Artifacts of Lasting Value" (co-PI, with J. Riedl and J. Kahn). Funded for \$630,133 for the period 11/1/05 through 10/31/08.

"ITR: Collaborative Research: Designing On-Line Communities to Enhance Participation -- Bridging Theory and Practice" (PI, with J. Riedl and L. Terveen; collaborating with researchers at CMU and U. of Michigan). Funded for \$1,246,017 for the period 9/1/03 through 8/31/08.

REU Supplement of \$6,000 funded May 6, 2004.

"CISE Research Resources: Being There: Mobile Devices for Community and Commerce" (co-PI, with L. Terveen, J. Riedl, and S. Shekhar). Funded for \$120,000 for the period 9/1/02 through 8/31/04.

"Reading a Balanced Diet: Foraging in Information Communities" (PI, with J. Riedl). Funded for \$410,000 for the period 09/01/01 through 08/31/04. Extended through 8/31/05.

"Research Instrumentation: Cluster Computing for Knowledge Discovery in Diverse Data Sets" (co-PI, with G. Karypis, J. Riedl, S. Shekhar, and M. Gini). Funded for \$74,516 for the period February 1, 2000 - January 31, 2003.

"Reflective GroupLens: Collaborative Filtering in Self-Aware Communities" (PI, with J. Riedl). Funded for \$303,264 for the period September 15, 1999 - August 30, 2002.

REU Supplement of \$15,000 funded July 31, 2002.

"CAREER: Algorithmic Issues in Collaborative Filtering." (PI) Funded August 1, 1998 - July 31, 2003 for \$326,262.

REU Supplement of \$10,000 funded June 1, 1999

Industrial Collaboration Supplement of \$10,000 funded August 27, 1999.

"Collaborative, Distributed Database for Brain Viewing" (co-PI, with J. Carlis, J. Riedl, and B. Elde). Funded August 1, 1997 - July 31,

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1999 for \$519,992.

"GroupLens: Scalable Collaborative Filtering for the Internet" (co-PI, with J. Riedl). Funded March 1, 1997 - February 29, 2000 for \$317,451.

REU Supplement of \$15,000 funded April 1, 1999.

"Graduate Research Traineeships: Human Interface Design for Access to Computers and Networked Information--Panning for Gold: Information Discovery on the Information Super-Highway" (co-PI, with A. Sameh, J. Riedl, and J. Srivastava) Funded September 1995 - August 2000 for \$562,500.

"RIA: User Interface Toolkit Architectures for Distributed Multimedia Applications" (PI) Funded July 1994 - July 1997 for \$99,865. Extended to July 1998 and supplemented twice to a total of \$110,744.

#### **National Institutes of Health**

Gender Identity and HIV Risk II (co-PI with Walter Bockting (PI) and other co-PIs). \$3,306,358 for the period 5/1/07 through 4/30/12.

Structural Factors to Lower Alcohol-Related HIV Risk (co-I with S. Rosser and several other co-I's). Approximately \$3.2 million for the period 9/6/06 through 8/31/11.

"Men's INternet Study II (MINTS-II) for HIV Prevention" (co-I with S. Rosser and several other co-Is). Approximately \$2.4 million for the period 8/1/04 through 7/31/09.

"Food and Nutrition System for Research (Renewal)" (co-I with J. Himes and other co-Is). Approximately \$3.4 million for period 12/1/03 through 11/30/06. First year of grant was pre-awarded. Rest was awarded in 2004. One year funded extension awarded in 2006.

"Internet HIV Prevention for Internet-Using Latino MSM" (co-I, with S. Rosser and several other co-Is). Funded for \$888,545 for the period 7/8/01 through 6/30/04.

"NDS-R Fluoride Component" (co-I, with John Himes and other co-Is). Funded for \$963,101 for the period 9/30/01 through 9/29/04.

"A Fall Prevention Program for High-Risk Elderly Women" (co-I, with J. Wyman and several other co-Is). Funded for \$2,971,282 for the period May 1, 2000 through February 28, 2005.

"Food and Nutrient Systems for Research" (co-I, with J. Himes and three other co-Is in epidemiology). \$2,123,653 funded by National Heart, Lung, and Blood Institute for period December 1, 1998 through November 30, 2003.

#### **United States Department of Transportation**

"Agent-Based Distraction-Free Interfaces: Investigation." (PI) Funded August 16, 1995 - August 15, 1996 for \$40,322.

#### **Awarded: Industrial Grants**

Unilever Corporate Research: "Exploring Temporal Collaborative Filtering to Support Behavior Change" \$25,000 (matched by funds from U of M Digital Technology Center) (with J. Riedl). 2006.

Aurora Technology: "Software Development for and Assessment of Multi-Screen Radiology Workstation." Funded June 1998 - January 1999 for \$40,000 (part of \$55,000 grant with R. Ritenour).

Net Perceptions, Inc: "GroupLens Research" (with J. Riedl). Funded September 1997 - September 2000 for \$60,000.

IBM: "Java Performance Monitoring and Visualization Tools" (with P. Yew and Z. Li). Funded February 1 1997 - January 31, 1998 for \$91,000 (PI of \$30,000 visualization component). Renewed (with P. Yew and D. Lilja) for March 1998 - December 1999 for \$90,000 (PI of \$36,000 visualization component).

Distributed Multimedia Research Center (Computing Devices International): "Commands as Media -- Implementation of Command Streams (renewed)" funded December 16, 1996 - December 15, 1997 for \$23,000.

Essex Consulting/NIH SBIR Subcontract: "Information System for Substance Abuse Practitioners." Funded September 1995 - March 1996 for \$18,578.

Distributed Multimedia Research Center (Computing Devices International): "Commands as Media -- Implementation of Command Streams" funded September 16, 1995 - September 15, 1996 for \$21,500.

#### **University Programs**

University of Minnesota Libraries: "Recommender Services in Academic Digital Libraries" \$25,000 (with J. Riedl). 2005. Another \$25,000 awarded as a renewal in 2006.

Digital Technology Center Faculty Grant: "Exploring Temporal Collaborative Filtering to Support Behavior Change" \$25,000 (matched by funds from Unilever Corporate Research) (with J. Riedl). 2005

President's 21<sup>st</sup> Century Interdisciplinary Conference Fund. "Information, Technology, and Everyday Life" (PI, with a large interdisciplinary team of collaborators). Funded for a Spring 2005 conference for \$25,000.

Digital Technology Center Faculty Grant to purchase an eye-tracker. Funded Spring 2004 for approximately \$20,000.

Planning Initiatives in Interdisciplinary Research, Scholarly and Creative Activities (IRSCA) program. "Interdisciplinary Education and Outreach in Internet Studies" (with L. Gurak and D. Burk). Funded July 1, 2001 - June 30, 2003 for \$20,000.

Eight Undergraduate Research Opportunity Program (UROP) awards.

Academic Health Center: Pilot Study on using Voice Playback and Recognition Software as part of an Exercise Tracking System for

Elderly Citizens (over age 75) (with J. Wyman, et. al.). Funded July 1, 1998 for approximately \$150,000.

University of Minnesota Academic Health Center: "Internet Self-Assessment in Pharmacology." (with L. Lichtblau, Univ. of Minnesota Department of Pharmacology) Funded June - November 1995 for \$2100.

Project MinneMAC: "Internet Self-Assessment in Pharmacology." (with L. Lichtblau) two equipment grants (Apple Macintosh equipment) funded 1995 and 1996.

University of Minnesota Graduate School: "Embeddable Applications: A New Abstraction for Multimedia Toolkits." Funded July 1, 1994 - December 15, 1995 for \$23,332.

University of Minnesota Graduate School: "Software Platforms for Collaborative, Distributed, Interactive Applications." Funded October 1993 - December 15, 1994 for \$14,067.

### Royalty-Related Funding

Research share of University of Minnesota's interest in Net Perceptions, Inc. Managed as a quasi-endowment fund yielding between \$150,000 and \$200,000 per year to support research projects (with J. Riedl).

### Other Funding Activity

Faculty participant in several additional funded proposals including an NSF Instructional Laboratory Instrumentation grant and an NSF Research Instrumentation grant.

## **Academic Courses Created**

Computer Science 5110: User Interface Design, Implementation, and Evaluation

first offering 1993-94, annually thereafter

revised in 1999 to become CSci 5115 with new focus on real-world projects

Computer Science 5111: GUI Toolkits and Their Implementation

first offering 1995-96, biennially thereafter

revised in 1999 to become CSci 5116 with new focus on comparative evaluation of toolkits

Computer Science 8110: Human Computer Interaction and User Interface Technology

first offering 1996-97, biennially thereafter

revised for 2001 to become CSci 8115 with 50% additional material

Industrial Short Course: User Interfaces: A Hands-On Introduction

first offering Summer 1995, annually or more frequently thereafter

Laboratory-Based Introduction to Procedural Programming in C (CSci 3113)

first offering Fall 1995, offered quarterly by department faculty

Software Engineering 5115: User Interface Design and Evaluation

designed for MS in Software Engineering program

first offered Fall 1998, annually thereafter

Software Engineering 5116: Graphical User Interface Toolkits

designed for MS in Software Engineering program

first offered Spring 1999, periodically thereafter; will replace 5111 in Computer Science curriculum

Computer Science 1001: An Overview of Computer Science

targeted at non-engineering students to provide an introduction to the core concepts of Computer Science

first offered Spring 2005, scheduled for annual offering

Computer Science 8001: Introduction to Research in Computer Science

co-created as part of Ph.D. redesign committee

co-taught pilot version of the course in Spring 2006

teaching full year-long versions in 2007-2008, 2008-2009.

Computer Science 5125: Collaborative and Social Computing

co-created with Loren Terveen

first offered Spring 2007, scheduled for biennial offering

Public Health 6000: Online Public Health Interventions

co-created with a team from Public Health and Rhetoric

co-teaching first offering in Fall 2007, second in Fall 2008.

## Students Advised

- Graduated: Brian Bailey (Ph.D. 2002, M.S. 1997)  
Dissertation topic: DEMAIS: A sketching tool for multimedia design  
Currently tenured Associate Professor at University of Illinois, Urbana-Champaign
- Jon Herlocker (Ph.D. 2000, M.S. 1998)  
Dissertation topic: Algorithmic and usage issues in collaborative filtering  
Formerly tenured Associate Professor at Oregon State  
Currently CTO of Decho Corp (an EMC company)
- Pamela Ludford (Ph.D. 2007)  
Dissertation topic: Local information services  
Currently independent consultant
- Sean McNee (Ph.D. 2006, M.S. 2003)  
Dissertation topic: Task-oriented recommendation, metrics, and research recommenders  
Currently Computing Research Scientist at Attenex (an FTI Consulting company)
- Alex Safonov (Ph.D. 2002, M.S. 1998)  
Dissertation topics: Web macros  
Currently principal engineer at General Dynamics Information Systems
- Ben Schafer (Ph.D. 2001, M.S. 1999)  
Dissertation topic: Meta-Recommender Systems  
Currently tenured Associate Professor at the University of Northern Iowa
- Patrick Baudisch (Ph.D. 2001)  
co-Advisor at the Technical University at Darmstadt, Germany  
Dissertation topic: Dynamic information filtering  
Currently researcher at Microsoft Research
- Badis Ben-Hamida (M.S. 1999 -- Topic: visualization of Java program performance)
- Natalie Bennett (MSSE 1999 -- Topic: usability testing of software engineering processes)
- Maketha Bridges (MSSE 2006 -- Topic: User interface for donor tracking)
- Chad Brown (MSSE 1999 -- Topic: PDA interface design and implementation)
- Randy Carpenter (MSSE 2005 -- Topic: Medical information system for cardiology)
- Matthew Chadwick (MSSE 2004 -- Topic: Scheduling software for a summer camp)
- Kun-Feng Chen (MSSE 1999 -- Topic: Interface and infrastructure for filtering Java methods)
- Chad Cmejla (MSSE 2005 -- Topic: Software for software defect tracking/management)
- Brent Dahlen (M.S. 1998 -- Topic: Sanitized ratings in collaborative filtering)
- Rich Davies (MSSE 2003 -- Topic: Extreme Programming case study)
- Ron Dosedel (MSSE 2005 -- Topic: Coronary Heart Disease web portal)
- David Doyle (M.S. 2000 -- Topic: Personalized computer-based education)
- Yvon Drollet (MSSE 2003 -- Topic: Extreme Programming case study)
- Kurtis Halvorson (MSSE 2000 -- Topic: Generic Visual Basic templates)
- Max Harper (M.S. 2006 -- Topic: Economic modeling of online community participation)
- Susan Herbst (M.S. 1996 -- Topic: UI design for counselor information system)
- Sunanda Iyengar (M.S. 1996 -- Topic: TclProp data propagation constraint system)
- Anil Kashyap (M.S. 1996 -- Topic: UI prototype for physics laboratory CBT)
- Chris Kwok (M.S. 1999 -- Topic: Java performance trace processing tools)
- Chris Leitschuh (MSSE 2007 -- Topic: Adapting Open-Source Software)
- David Leppik (M.S. 1998 -- Topic: Partitioning in collaborative filtering)
- Peksun Mak (MSSE 2000 -- Topic: XML for event calendars)
- Sumit Mishra (M.S. 2000 -- Topic: Phone-based system for elderly exercise intervention)
- Praveen Mittal (MSSE 2006 -- Topic: Managing volunteers to create online community)
- Matthew Moore (MSSE 2000 -- Topic: Dermatology exam reporting interface)
- Joe Morin (MSSE 1999 -- Topic: Interfaces and databases for a recommender system web site)
- Mikko Niemioja (MSSE 2007 -- Topic: Visual autism survey)
- Vajira Nissanka (M.S. 2002 -- Topic: Better web search through query modifications)
- Mark O'Connor (M.S. 2000 -- Topic: Multi-user recommendation interfaces)
- Alex Perez (MSSE 2005 -- Topic: Medical information system for cardiology)
- Mile Petrov (M.S. 1998 -- Topic: Vocabulary size in speech recognition)
- Ann Phillippi (M.S. 1995 -- Topic: Walkthrough usability analysis techniques)
- Kien Quan (MSSE 1999 -- Topic: interfaces and databases for a recommender system web site)

Ramya Ramachandran (M.S. 1998 -- Topic: Neural net analysis of UI surveys)  
Hany Ramadan (M.S. 1999 -- Topic: Enhancements to starfield/dynamic query interfaces)  
Milinda Rambel-Stone (MSSE 1999 -- Topic: usability testing of software engineering processes)  
Royce Shin (M.S. 1995 -- Topic: Database and interface design for ISAP)  
Kristin Storvick (M.S. 2008 (Scientific Computation) – Topic: Combinatorial Product Search Interfaces)  
Mark Swan (M.S. 1998 -- Topic: Managing computation in scientific visualization)  
Larry Temple (M.S. 1998 -- Topic: Unix micro-kernel file system & instructional design)  
Hongguo Tian (M.S. 2000 -- Topic: Search and indexing for news filtering services)  
Sai Tong (M.S. 1994 -- Topic: Study of gopher usage patterns)  
Duo Wang (MSSE 2000 -- Topic: Electronic data access interfaces)  
Zheng Wang (MSSE 2004 – Topic: Web interface for corporate document library)  
Patrick Whalin (M.S. 2008 – Topic: Usability)  
Tom Zielund (M.S. 1997 -- Topic: Confidence displays in recommender systems)

Current Ph.D.: Jilin Chen (Current topic: Recommendation and digital libraries)  
Sinan Goknur (Current topic: Online HIV Prevention)  
Max Harper (Current topic: Participation in Online Community)  
Jason Michaelson (Current topic: TBD)

Former UG: Gabriel Aguirre (NSF REU -- Topic: Explanation interfaces for recommender systems)  
George Atendido (UROP -- Topic: Collaborative filtering)  
Mo DeJong (NSF REU -- Topic: Multimedia toolkits and authoring)  
Kem Ferguson (MSDP -- Topic: Web site design)  
Mary Bernadette Garza (MSDP -- Topic: UI for recommender systems)  
Nathaniel Good (UROP & NSF REU -- Topic: Collaborative filtering & agents)  
Ammon Hall (Honors research program -- Topic: Collaborative filtering)  
Hae Young Kim (UROP -- Topic: Interactive web site design)  
(NSF REU -- Topic: Statistical techniques for improving recommender systems)  
Tony Lam (NSF REU & UROP -- Topic: Interface and experimental design for recommender systems)  
Tim Lee (NSF REU & UROP -- Topic: Critique and community interfaces for recommender systems)J.J.  
Plude (IBMSF project -- Topic: Interactive visualization of trace trees)  
Paul Sturm (UROP -- Topic: Interaction and interface design for ISAP)  
Alan Wivell (IDIM -- Major: New Media Engineering)  
(additional UG students conducted directed study)

## **Presentations since June 1994**

### *Keynotes and Invited Plenary Presentations*

EPFL Summer Research Institute – invited scholar: “User Experiences and Systems Issues with Online Recommender Systems” – 7/07  
World Usability Day (Minneapolis) – invited Keynote: "Bridging Computer Science and Behavioral Science: Examples" – 11/06  
Michigan World Usability Day – invited speaker: "User Experiences and Systems Issues with Online Recommender Systems" – 11/05  
Third Artificial Intelligence Forum – invited Keynote: "Recommender Systems: Research Issues and User Experience" at ULBRA (the Lutheran University of Brazil), Canoas, Rio Grande do Sul, Brazil – 9/05  
Advances in Recommender Systems Workshop – invited speaker: "Recommender Systems, Human Computer Interaction, and Evaluation" at the 2005 Biennial Israeli Symposium on Foundations of Artificial Intelligence, Haifa – 6/05  
International Conference on Artificial Reality and Telexistence – invited speaker: "The Human Factor in Mobile and Wearable Technologies: Making the Transition from Science to Social Good" – 11/04  
Computer Society of South Africa -- invited Keynote " Human factors in collaborative filtering/recommender systems" -- 2/02  
CHI SouthIndia 2002 Conference -- invited Keynote Tutorial on User Interface Design -- 1/02  
Rio de Janeiro Workshop on Human-Computer Interaction Research -- invited Keynote "The GroupLens Research Project" -- 8/01  
Eighth International Conference on User Modeling -- invited speaker: "Heavyweight Applications of Lightweight User Model" -- 7/01  
SIGIR 99 Recommender Systems Workshop -- Invited Keynote: "Recommender Systems: Opportunities and Obstacles" -- 8/99  
Fifth DELOS Workshop on Collaborative Filtering -- distinguished speaker -- GroupLens Experience and Research Issues on Collaborative Filtering -- 11/97

### *Invited Talks to Academia and Industry*

University of British Columbia (Bridging Behavioral Science and Computer Science) 6/08

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Microsoft Silicon Valley Center (Online Question-Answering Sites) 5/08  
Microsoft Bay Area Research Center (Online Question-Answering Sites) 2/08  
Japan Science and Technology Agency (Faculty Role in Reducing Research Administrative Burden) 2/08  
EPFL (Bridging Behavioral Science and Computer Science) 7/07  
UMN New Media Research Breakfast (Online Community) 4/07  
UMN CSci 8001 Graduate Research Course (HCI) 3/07  
UMN MSSE Seminar (HCI) 10/06  
University of Maryland (Bridging Behavioral Science and Computer Science) 9/06  
CNR, Italy (Recommender Systems) 6/06  
Humboldt University (Bridging Behavioral Science and Computer Science) 6/06  
SIGCHI Bangalore (Recommender Systems) 6/06  
HCISIG, Sydney Australia (Bridging Behavioral Science and Computer Science) 6/06  
University of Sydney (Recommender Systems) 6/06  
University of Sydney (Building an HCI Curriculum) 6/06  
University of Melbourne (Bridging Behavioral Science and Computer Science) 6/06  
Monash University (Recommender Systems) 6/06  
New Zealand HCI Workshop (Recommender Systems) 6/06  
University of Waikato (Bridging Behavioral Science and Computer Science) 6/06  
Puget Sound SIGCHI Chapter (Recommender Systems) 5/06  
IBM TJ Watson Research Center (GroupLens Research) 12/05  
University of Michigan (Bridging Behavioral Science and Computer Science) 11/05  
Michigan State University (GroupLens Research) 11/05  
Michigan State University (Building an HCI Curriculum) 11/05  
Federal University of Rio Grande do Sul, Brazil (GroupLens Research) 9/05  
University of Haifa (GroupLens Research) 6/05  
DFKI Saarbrücken (GroupLens Research) 6/05  
University of Freiburg (GroupLens Research) 6/05  
Unilever Corporate Research (Research Overview) 12/04  
Singapore Computer Society (User Interface Design) 12/04  
Nanyang Technological University, Singapore (Bridging Behavioral Science and Computer Science) 12/04  
University of Tokyo (Bridging Behavioral Science and Computer Science) 12/04  
Shanghai Jiaotong University (GroupLens Research) 12/04  
ACM SIGCHI China Chapter, Opening Meeting (HCI, SIGCHI, ACM, and related topics) 12/04  
Microsoft Research Asia (Bridging Behavioral Science and Computer Science) 12/04  
Univ. of Calif., Irvine, Inst. for Software Research Distinguished Lecture (Bridging Behavioral Science and Computer Science) 10/04  
Microsoft Research (Bridging Behavioral Science and Computer Science) 7/04  
Northwestern University (GroupLens Research) 5/04  
University of South Florida (IEEE Lecture – User Interface Design) 4/04  
Microsoft Bay Area Research Center (Research Overview) 3/04  
University of Minnesota Statistics Colloquium (Sex, Lies, and Video Disks) 12/03  
University of Wisconsin, Eau Claire (Bridging Behavioral Science and Computer Science) 12/03  
University of Saskatchewan (GroupLens Research) 11/03  
University of Saskatchewan (Bridging Behavioral Science and Computer Science) 11/03  
University of California, Berkeley (Bridging Behavioral Science and Computer Science) 10/03  
University of Minnesota, Kinesiology 3505/5505 (User Interface Design) 10/03  
IEEE Long Island Chapter (IEEE Lecture – User Interface Design) 6/03  
New Jersey Institute of Technology (GroupLens Research) 6/03  
University of Minnesota, Duluth (GroupLens Research) 3/03  
Miami University, Ohio (ACM Lecture -- GroupLens Research) 1/03  
Retek (HCI Overview) 11/02

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NIH Panel on Structural Interventions in HIV Research (Technology and Internet Research) 11/02  
U of M MIS Research Center (Collaborative Filtering, with J. Riedl) 9/02  
University of York, England (Interfaces to Alleviate Information Overload) 5/02  
University of Sunderland, England (GroupLens Research) 5/02  
Napier University, Scotland (Interfaces to Alleviate Information Overload) 5/02  
University of Glasgow, Scotland (Interfaces to Alleviate Information Overload) 5/02  
University College, London, England (Interfaces to Alleviate Information Overload) 5/02  
Cambridge University, England (Interfaces to Alleviate Information Overload) 5/02  
University of Limerick, Ireland (Interfaces to Alleviate Information Overload) 5/02  
Edina Rotary (Applications of Collaborative Filtering) 4/02  
Carleton College (ACM Lecture -- GroupLens Research) 4/02  
Kinesiology 5720 (Human Factors Issues with User Interface Design) 4/02  
Sony Computer Science Laboratories, Japan (Interfaces to Alleviate Information Overload) 3/02  
Osaka University, Japan (Interfaces to Alleviate Information Overload) 3/02  
ATR, Japan (GroupLens Research) 3/02  
University of Tsukuba, Japan (Interfaces to Alleviate Information Overload) 3/02  
UNISA, South Africa (GroupLens Research) 2/02  
University of Pretoria, South Africa (Multimedia Authoring) 2/02  
University of Port Elizabeth, South Africa (Interfaces to Alleviate Information Overload) 2/02  
University of Aarhus, Denmark (GroupLens Research) 2/02  
Academy of Economical Studies, Romania (GroupLens Research) 2/02  
University Lucian Blaga, Romania (Multimedia Authoring) 2/02  
Allegheny College (ACM Lecture -- GroupLens Research) 2/02  
Microsoft Research Asia, China (GroupLens Research) 1/02  
City University of Hong Kong (GroupLens Research) 1/02  
Hong Kong University of Science and Technology (GroupLens Research) 1/02  
Kent Ridge Digital Laboratories, Singapore (GroupLens Research) 1/02  
National University of Singapore (GroupLens Research) 1/02  
CHI North India (GroupLens Research) 1/02  
IBM India Research Lab (GroupLens Research) 1/02  
Cognizant Corp, India (User Interface Design) 1/02  
Namahn, Belgium (Multimedia Authoring) 12/01  
CERTI, Belgium (GroupLens Research) 12/01  
University of Limberg and BelCHI, Belgium (GroupLens Research) 12/01  
Eurecom, France (GroupLens Research) 12/01  
Xerox Research Center Europe, France (GroupLens Research) 11/01  
INRIA Rhône-Alpes, France (Multimedia Authoring) 11/01  
Eurisco and SIGCHI Toulouse, France (GroupLens Research) 11/01  
University of California, Berkeley, Human-Centered Computing Seminar (GroupLens Research) 11/01  
Vrije Universiteit and SIGCHI.NL, Amsterdam, Netherlands (GroupLens Research) 11/01  
University of Oldenburg, Local ACM Chapter and GI Chapter, Germany (GroupLens Research) 10/01  
Fraunhofer Gesellschaft (former GMD) Bonn, Germany (GroupLens Research) 10/01  
SIGCHI Austria and Center for Usability Research and Engineering, Austria (GroupLens Research) 10/01  
Kinesiology 5505 -- Introduction to Human-Centered Design (HCI Overview) 10/01  
MERL -- Mitsubishi Electric Research Laboratories (GroupLens Research) 10/01  
University of Massachusetts, Lowell (ACM Lecture -- GroupLens Research) 10/01  
MITRE Corporation (GroupLens Research) 10/01  
KTH (Royal Institute of Technology), Sweden (Interfaces to Alleviate Information Overload) 9/01  
University of Linköping, Sweden (GroupLens Research) 9/01  
Cell Networks, Sweden (Future of HCI) 9/01

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STIMDI (Swedish HCI Society), Sweden (Future of HCI) 9/01  
Swedish Institute of Computer Science, Sweden (GroupLens Research) 9/01  
Federal University of Rio Grande do Norte, Brazil (GroupLens Research) 8/01  
State University of São Paulo, São Carlos, Brazil (GroupLens Research) 8/01  
Federal University of São Carlos, Brazil (GroupLens Research and Distance Learning) 8/01  
Federal University of Santa Catarina, Brazil (GroupLens Research) 8/01  
Universidade do Sul de Santa Catarina, Brazil (GroupLens Research) 8/01  
State University of Maringá, Brazil (GroupLens Research) 8/01  
University of Tampere, Finland (GroupLens Research) 7/01  
GMD IPSI, Darmstadt, Germany (GroupLens Research) 3/01  
Accenture Center for Strategic Technology Research (GroupLens Research) 1/01  
North Dakota State University (ACM Lecture: GroupLens Research) 5/00  
University of Central Florida (ACM Lecture: GroupLens Research) 3/00  
INCOSE (Systems Engineers Association) (Introductory talk on User Interfaces) 3/00  
TwinSPIN (Twin Cities software process improvement network) (Introductory talk on User Interfaces) 5/99  
Carlson School of Management (GroupLens Research) 4/99  
Allegheny College (ACM Lecture: GroupLens Research) 12/98  
UMN Computer Science Colloquium (spiral visualization, with J. Carlis) 11/98  
IT 1001 (freshman seminar) (Introductory talk on User Interfaces) 11/98  
UMN MSSE Seminar (Internet, World Wide Web, and HCI) 10/98  
MITRE (GroupLens Research) 8/98  
Information Advantage (GroupLens Research) 7/98  
Donaldson Company (Introductory talk on User Interfaces) 6/98  
Columbia University (GroupLens Research) 5/98  
UMN Health Informatics Colloquium (Introductory talk on User Interfaces) 4/98  
Twin Cities Chapters ASIS/SLA (Introductory talk on User Interfaces) 3/98  
University of Maryland Baltimore County (GroupLens Research) 2/98  
University of Maryland College Park (GroupLens Research) 2/98  
UMN Cognitive Science Colloquium (Internet, World Wide Web, and HCI) 1/98  
DEC Systems Research Center (GroupLens Research) 7/97  
Xerox PARC (GroupLens Research) 7/97  
Sun Microsystems Laboratories (GroupLens Research) 7/97  
IBM Almaden Research Center (GroupLens Research) 7/97  
Mitsubishi Electric Research Lab (GroupLens Research) 7/97  
UMN Cognitive Science Proseminar (GroupLens Research) 5/97  
Plymouth Schools Young Science Program (communication through the Internet) 4/97  
Metropolitan State University (Multimedia Systems: Command Streams, Authoring, Synchronization) 3/97  
UMN Undergraduate Computer Science Colloquium (Web architectures for interaction) 3/97  
UMN Computer Science Colloquium (algorithmic issues in collaborative filtering) 2/97  
UMN Pharmacology Seminar (ISAP) 10/96  
Hazelden Chemical Dependency Clinic (ITreS presentation) 6/96  
DataCard (Advanced talk on User Interface Design/Evaluation) 5/96  
Instrument Society of America (Internet, World Wide Web, and HCI) 5/96  
Xerox PARC (Multimedia Systems: Command Streams, Authoring, Synchronization) 3/96  
Sun Microsystems Laboratories (Multimedia Systems: Command Streams, Authoring, Synchronization) 3/96  
Loral (Introductory talk on User Interfaces) 1/96  
UMN Computer Science Colloquium (multimedia command streams) 1/96  
IT Alumni Association (Internet, World Wide Web, and HCI) 1/96  
Stanford University (GroupLens Research) 11/95  
Harvard University (Multimedia Systems: Command Streams, Authoring, Synchronization) 11/95

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University of Toronto (Multimedia Systems: Command Streams, Authoring, Synchronization) 7/95  
DataCard (Introductory talk on User Interfaces) 4/95  
U.W. Milwaukee (Multimedia Systems: Command Streams, Authoring, Synchronization) 3/95  
UMN Center for Learning, Perception and Cognition (Introductory talk on User Interfaces) 2/95  
Honeywell Technology Center (Internet, World Wide Web, and HCI) 2/95  
UMN Computer Science Colloquium (human interfaces to prediction systems) 1/95  
U.C. Berkeley (Multimedia Systems: Command Streams, Authoring, Synchronization) 10/94

### Conference and Workshop Presentations

PRIM&R Advancing Ethical Research Conference 2008 – Internet Research: Doing Virtual Research Virtuously – 11/08  
E-Social-Science 2007 -- Online Field Experiments: Lessons from CommunityLab – 10/07  
AAAI 2006 -- Lessons on Applying Automated Recommender Systems to Information Seeking Tasks – 7/06  
CNI Fall Task Force Meeting Project Briefing -- TechLens: Exploring the Use of Recommenders to Support Users of Digital Libraries – 12/05  
NSF Future of the Survey Interview Workshop at University of Michigan -- Online survey ethics and pragmatics: Lessons from two HIV risk assessment studies – 11/05  
HCI International 2005 -- Lessons Learned in Implementing the CHIplace Online Community – 7/05  
Unilever Spark Workshop on Behavior Change through Automated Dialog – Behavior Change through Recommenders – 11/04  
HCI 2003 -- MovieLens Unplugged: Experiences with a Recommender System on Four Mobile Devices – 9/03  
ECSCW 2001 -- "PolyLens: A Recommender System for Groups of Users" -- 9/01  
AAAI 99 -- "Combining Collaborative Filtering with Personal Agents for Better Recommendations" -- 7/99  
CHI 99 Recommender Systems Workshop -- "Toward Research Resources for Recommender Systems" -- 5/99  
CSCW 98 -- "Filterbots in GroupLens" (with J. Riedl) -- 11/98  
UIST '98 -- "Interactive Visualization of Serial Periodic Data" (with J. Carlis) -- 11/98  
AAAI Workshop on Recommender Systems -- "No Filter is an Island" -- 7/98  
Software Publishers' Association 13th Annual Conference -- "The Web Value Chain" -- 9/97  
IFIP WG 13.1 Workshop on Teaching Design of Interactive Systems -- "The Overnight Staff" -- 5/97  
CHI 97 Basic Research Symposium -- "Creating Multimedia System Toolkits" and "The GroupLens Research Project: Exploring Collaborative Filtering" -- 3/97  
Usenix Annual Technical Conference -- "Experiences with GroupLens: Making Usenet Useful Again" -- 1/97  
AMIA Fall Symposium -- "Web-Based Delivery and Open-Architecture Database Support in the ITreS Counselor Information System" -- 10/96  
Collaborative Filtering Workshop at U.C. Berkeley -- "GroupLens Collaborative Filtering System" -- 3/96  
Tcl/Tk Workshop -- "TclProp: A Data-Propagation Formula Manager for Tcl and Tk." -- 7/95  
Tcl/Tk Workshop -- "Tcl Commands as Media in a Distributed Multimedia Toolkit." -- 7/95  
CHI 95 Basic Research Symposium -- "Fulfilling the Promise of Multimedia: Intelligent and Usable Multimedia Applications" -- 4/95  
1994 International Conference on Consumer Electronics -- "State Problems in Human-Controlled Devices" -- 6/94

### Demonstrations and Laboratory Tours

TechLens: A Researcher's Desktop (RecSys 2007) 10/07  
Agents '98 laboratory tour (GroupLens project) 5/98  
IT Week laboratory tour (GroupLens project) 5/98 and 5/01  
IT Week laboratory tour (Multimedia projects) 5/97 and 5/96  
CSCW 96 -- "GroupLens Collaborative Filtering System" (refereed demonstration) -- 11/96

### Short Courses and Tutorials

SIGMOD 2008 – half-day tutorial on Recommender Systems 6/08  
SIGIR 2007 – half-day tutorial on Recommender Systems 7/07  
Technical University of Catalonia – 5 day short course on UI design and HCI 5/07  
AH 2006 – half-day tutorial on Advanced issues in Recommender Systems 6/06  
AAAI 2004 – full-day tutorial on Recommender Systems (with J. Riedl and A. Jameson) 7/04  
CHI 2004 – invited hour-long tutorial on the structure of the field of HCI 4/04

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IJCAI 2003 – half-day tutorial on Recommender Systems (with J. Riedl and A. Jameson) 8/03  
CHI 2003 – full day tutorial on Recommender Systems (with J. Riedl) 4/03  
IUI 2003 – half-day tutorial on Recommender Systems (with J. Riedl) 1/03  
CSCW 2002 – full-day tutorial on Recommender Systems (with J. Riedl) 11/02  
AAAI 2002 -- full-day tutorial on Recommender Systems (with J. Riedl and A. Jameson) 7/02  
CHI SouthIndia 2002 Conference -- invited Keynote Tutorial on User Interface Design 1/02  
FH Joanneum (Graz, Austria) -- one-credit short course on Collaborative Filtering and User Interface Design (15 hours) 10/01  
ACM CSCW 2000 Conference -- full-day tutorial on Recommender Systems (with J. Riedl) 12/00  
ACM E-Commerce Conference 2000 -- half day tutorial on Recommender Systems for E-Commerce (with J. Riedl) 10/00  
National Computer Systems (full-day short course on UI design for the Web) 11/99  
ASIS MN 1999 Continuing Education Class (user interfaces, information overload, internet) 3/99  
Tcl/Tk Workshop -- 1/2 day tutorial on constraint programming (with A. Safonov) -- 7/97  
Tutorial at Usenix Winter Technical Conference (introduction to user interfaces) 1/97  
UMN "Hot Topics" half-day course (Internet, HCI, Object-Oriented Programming with J. Riedl) 6/96  
Loral (Lockheed Martin) (20 hour course on UI design) 6/96

### Panels and Other Talks

URJ Great Lakes Biennial – “Social Computing 101: Reaching the Digital Generation” – 11/08  
MSR Faculty Summit 2008 – “Artificial Intelligence Theory and Practice: Hard Challenges and Opportunities Ahead” – 7/08  
MSR Faculty Summit 2008 – “Networks, Social Science, and Education: TeaCHING, Linking, and Thinking About Connection” – 7/08  
JSTA (Japan Science and Technology Agency) – “Faculty Participation in Streamlining Research Administration” – 2/08  
FDP Winter Meeting – “A Faculty Perspective on Modular Budgets” – 1/08  
National Academies Government-University-Industry Research Roundtable – “FDP Update” – 2/06  
NCURA Annual Meeting – “FDP Update” – 11/05  
Critical Issues in eHealth Research Conference (NIH) – “Ethics of eHealth Research” – 6/05  
SRA Western Section meeting – “FDP Update” – 5/05  
IJCAI 2003 Doctoral Symposium Advisor/Panelist – 8/03  
CHI 2003 – “Spam, Spam, Spam, Spam – How can we stop it?” (Panelist) – 4/03  
User Modeling 2001 -- “Industry Panel” (Panelist) -- 7/01  
CHI 2001 -- “Start-up or Ph.D.” (Panelist) -- 4/01  
RASTEC (Rhetoric student group) Panel on 2000 Presidential Election -- 11/00  
Mount Zion Brotherhood -- “Starting an Internet Company: From Idea to IPO” -- 2/00  
Saint Paul JCC (GroupLens Research) 12/99  
Minnesota Digital Technology Summit -- Session Chair and Panel Organizer -- 10/97  
NSF Interactive Systems Grantees Workshop -- Panel Chair and Moderator -- 8/97  
AMIA Fall Symposium -- “Computer Technology, The Internet, and Mental Health Care Informatics” (Panel) -- 10/96  
Tcl/Tk Workshop -- “The Future of Tcl/Tk” (Panel) -- 7/96  
ACM Multimedia Conference -- “Multimedia Education” (Panel) -- 11/95  
Tcl/Tk Workshop -- “Tcl/Tk in the Classroom” (Panel) -- 7/95  
Minority Round Table (research in Computer Science) 7/94

## **Technology Transfer**

Founder, Net Perceptions, Inc.

Co-founder and then consulting scientist at Net Perceptions, a company founded to commercialize the GroupLens collaborative filtering project. Company was founded in July 1996 and grew to become the industry leader. Net Perceptions grew to over three hundred employees at its peak with headquarters in Minnesota and various sales offices nationwide. The company hit economic difficulties with the Internet downturn and its assets were eventually acquired.

Internet Broadcasting Systems, Inc.

Serve as consultant focusing on usability and user-centered design issues for the leading developer of

television station news websites. Worked with IBS on the usability reviews and evaluations for the NBCOlympics.com web site (which they developed and deployed for the 2004 games).

Technical Advisory Board, Sistina Software, Inc.

Served as technical advisor to a company specializing in global file systems and the administrative tools for configuring them. Sistina was purchased by Red Hat.

Advisory Board, i5 Digital, LLC

Served as advisor to Internet start-up incubator that owns several small companies.

Principal Consulting Scientist, Essex Consulting, Inc.

Served as consultant to a small business that was developing a counselor information system for substance abuse counselors. Collaborated on NIH grants (including a subcontract through the U of M) and providing general technical and business guidance.

IBM San Francisco Project

Project with P. Yew and D. Lilja to develop advanced Java performance tracing and visualization tools.

Aurora Technology

Project with R. Ritenour to jointly develop and test next-generation radiology workstation. Focus was on multiple monochrome displays with detailed image control capabilities.

HA Technical Solutions

Initially served as expert witness in software copyright case. Later consulted for firm that is developing and marketing high availability software solutions for workstations and servers.

HealthTel.net

Advisor of start-up company seeking to develop telephone-based behavioral health care monitoring and behavior-change systems.

IdeaServices

Founded by L. Lichtblau to commercialize ISAP pharmacology education web site. Site operates at <http://www.university.com/ISAP> (free for academic use). No involvement other than initial development of ISAP (licensed to IdeaServices in exchange for perpetual use license for U of M students).

Tcl Consortium.

Founding Member of Board of Directors

NextFavorite

Advisor to start-up company seeking to develop affinity marketing/recommender systems brand.

Other Consulting and Advisory Roles

Serve as consultant to several small and mid-sized companies in Minnesota, including National Computer Systems and Anlon Systems. Serve as expert witness in several intellectual property cases with local and national law firms. Also have taught short courses to several larger local companies including National Computer Systems and Lockheed Martin.

## **Major Department/University Service Activities (since Fall 1999)**

2008-2009	Associate Department Head Chair, Department Computing Committee Mentoring Committees for Junior Faculty Senate Committee on Finance and Planning IT Instructional Computing Committee U of M Alternate Faculty Representative to Federal Demonstration Partnership
2007-2008	Chair, Department Computing Committee Elected Member, Department Strategic Planning and Advisory Committee Department Awards Committee Mentoring Committees for Junior Faculty (chair and member) U of M Faculty Representative to Federal Demonstration Partnership U of M Senate (elected) Senate Committee on Finance and Planning IT Instructional Computing Committee
2006-2007	Chair, Department Faculty-Staff Relations Committee Chair, Department Computing Committee

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Mentoring Committees for Junior Faculty  
 U of M Faculty Representative to Federal Demonstration Partnership  
     vice-Chair of FDP (through 1/07), service on FDP Strategic Planning Committee  
 U of M Senate (elected)  
 Senate Committee on Finance and Planning  
 IT Instructional Computing Committee

2005-2006      Chair, Department Ph.D. Program Revision Committee  
                   Elected Member, Department Strategic Planning and Advisory Committee  
                   Mentoring Committees for Junior Faculty  
                   U of M Faculty Representative to Federal Demonstration Partnership  
                   vice-Chair of FDP, service on FDP Strategic Planning Committee  
                   U of M Senate (elected)  
                   Senate Committee on Finance and Planning  
                   IT Committee to Re-Evaluate IT Computer Labs and Fees

2004-2005      Director of Graduate Studies, Computer Science  
                   Department Head Search Committee, Computer Science  
                   Department Curriculum Committee  
                   Elected Member, Department Strategic Planning Committee  
                   Mentoring Committees for Junior Faculty  
                   Engineering, Physical, and Mathematical Sciences Policy and Review Council  
                   U of M Faculty Representative to Federal Demonstration Partnership  
                   Chair of Faculty Publications Subcommittee of the FDP; Later vice-Chair of FDP  
                   Senate Committee on Finance and Planning  
                   Electronic Effort Certification Oversight Committee

2003-2004      Director of Graduate Studies, Computer & Information Sciences  
                   Department Curriculum Committee  
                   Development of Department Vision White Paper  
                   Mentoring Committees for Junior Faculty  
                   Engineering, Physical, and Mathematical Sciences Policy and Review Council  
                   U of M Faculty Representative to Federal Demonstration Partnership  
                   Chair of Faculty Publications Subcommittee of the FDP  
                   University Senate  
                   Senate Committee on Finance and Planning  
                   Provost's Task Force to Study Year-Round (Trimester) Operation  
                   Electronic Effort Certification Oversight Committee

2002-2003      Director of Graduate Studies, Computer & Information Sciences  
                   Department Advisory Committee  
                   Department Curriculum Committee  
                   Mentoring Committees for Junior Faculty  
                   Engineering, Physical, and Mathematical Sciences Policy and Review Council  
                   U of M Faculty Representative to Federal Demonstration Partnership  
                   University Senate  
                   Senate Committee on Finance and Planning  
                   Senate Task Force to re-Draft Governance Policy

2001-2002      <on sabbatical>  
                   Mentoring Committees for Junior Faculty  
                   University Senate  
                   Graduate School Committee to re-Draft Constitution  
                   Committee to develop Usability Laboratory

2000-2001      Director of Graduate Studies, Software Engineering  
                   Department Advisory Committee  
                   Mentoring Committees for Junior Faculty  
                   Joint Psych/CSE Faculty Search Committee  
                   Department Web Redesign Committee  
                   Graduate School Committee to re-Draft Constitution  
                   Physical Sciences Policy and Review Council

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Senate Committee on Finance and Planning  
Subcommittee on Twin Cities Facilities and Support Services  
Ad Hoc University Committee on Data Collection Policy

1999-2000     Director of Graduate Studies, Software Engineering  
Department Advisory Committee  
Recruiting Committee  
Colloquium Chair  
IT/DTC Design Faculty Search Committee  
Joint Psych/CSE Faculty Search Committee  
Physical Sciences Policy and Review Council

## **Legal Consulting**

(cases with expert declarations, depositions, or trial testimony)

Compuware Corp. v. IBM Corp. (2004)

Wrote expert declaration in patent case. Case settled.

ePlus Inc. v. Ariba Inc. (2004)

Wrote expert declaration in patent case. Scope of case was limited in summary judgment; was not informed of final disposition of case.

Microsoft Corp. v. Multi-Tech Systems, Inc. (2002)

Wrote expert declaration in patent case. Case was decided at trial, and affirmed on appeal.

USA Video Technology Corp. v. Movielink LLC (2004)

Wrote expert declaration and was deposed in patent case. Case resolved by summary judgment.