

# John T. Riedl

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<b>Address</b>	Computer Science Department University of Minnesota Minneapolis, MN 55455		
<b>Education</b>	B.S. in Mathematics	University of Notre Dame	May 1983
	M.S. in Computer Sciences	Purdue University	May 1985
	Ph.D. in Computer Sciences	Purdue University	May 1990
<b>Affiliations</b>	Member of ACM, IEEE, and AAAI		
<b>Research Interests</b>	Information Filtering, Collaborative Systems, Distributed Systems.		
<b>Awards &amp; Honors</b>	ACM Distinguished Scientist		2007
	Best Paper Award, 2006 ACM CSCW Conference (with S. Sen and seven other students)		2006
	IEEE Senior Member		2006
	Commerce Technology Award, World Technology Network (NETP)		1999
	MIT Sloan School Award for Innovation in E-Commerce (NETP)		1999
	George Taylor Award for Exceptional Contributions to Teaching		1995-96
	Outstanding Teacher Award (shared)		1992-93
	Bush Foundation Project for Teaching Excellence		1991-92
	Outstanding Teacher Award		1991-92
	Outstanding Teacher Award (University of Minnesota Computer Science Department)		1990-91
	AT&T Bell Laboratories Ph.D. Scholarship Recipient		1988-90
	Outstanding Paper Award, 1988 Data Engineering Conference (with B. Bhargava)		1988
	David Ross Fellowship Recipient		1986-88
	Best Teaching Assistant Award, Computer Sciences, Purdue		1985
<b>Professional Experience</b>	Professor, University of Minnesota, 2003–present		
	Associate Professor, University of Minnesota, 1996–2003		
	Chief Scientist, Net Perceptions, 1998–2002		
	Chief Technology Officer, Net Perceptions, 1996–1998		
	Assistant Professor, University of Minnesota, 1990–1996		
	Research Assistant, Purdue University, 1985–1989		
	Teaching Assistant, Purdue University, 1983–1985		

## Professional Activities

Editorial board member for ACM Transactions on the Web.

Guest Editor, IEEE Internet Computing Magazine, Special issue on Personalization and Privacy, November 2001.

Guest Editor, ACM ToCHI, Special issue on Recommendation Interfaces, 2005.

Program committee co-chair for IAAI 2002. Program committee chair for IAAI 2003. Workshop co-chair for CSCW 2002. Vice co-Chair for E-Commerce of WWW 2003 (with Michael Wellman). Area Chair for SIGIR 2004 and 2005. Program committee co-chair for IUI 2005 (with Tony Jameson). General Chair for ACM E-Commerce 2005. Program committee co-chair for ACM Recommender Systems 2007 (with Barry Smyth). Program committee co-chair for ACM E-Commerce 2008 (with Tuomas Sandholm).

Member of the program committee for *CIKM '93, COOCS '94, CSCW '94, DCS 94, CSCW '96, E-Commerce '00, IAAI '00, SIAM Data Mining 2001, IAAI '01, SIAM Data Mining 2002, ACM SIGIR 2002, ICDM 2002, WWW '02, IAAI '02, SIAM Data Mining 2003, IUI 2003, ACM SIGIR 2003, ACM IUI 2006, ACM CHI 2006, IAAI 2006, AAAI Nectar 2006, IAAI 2007, ACM IR 2007, ACM Group 2007, AAAI 2007, AAAI Nectar 2007, ACM IUI 2007, KDD Cup 2007, Netflix Challenge 2007, Netflix Challenge 2008, ACM CHI 2008, AAAI Nectar 2008, ACM IUI 2008, ACM WWW 2008.*

Referee for journals (*ACM Transactions on Information Systems, ACM Transactions on Computer Human Interfaces, IEEE Computer, IEEE Transactions on Knowledge and Data Engineering, ACM Transactions on Computer Systems, Software Practice and Experience*) and the National Science Foundation.

## Teaching

I have taught many courses in the areas of programming and systems at both the graduate and undergraduate level, and introductory programming courses for undergraduates. I have worked with colleagues to create and adapt these courses over the years. My teaching evaluations have consistently been among the highest in the department, and I have won several departmental and college awards for teaching.

I have taught many tutorials on recommender systems, including those at CSCW 1996, ACM E-Commerce 2000, CSCW 2000, CSCW 2002, AAI 2002, IUI 2003, CHI 2003, IJCAI 2003, AAI 2004, User Modelling 2005, and IUI 2007. All of these tutorials have received strong evaluations, and several of them have been the highest ranked tutorial at the conference.

In the summer of 2002 and 2003 I taught an intensive three week residential course (with Al Borchers) called Summer Explorations in Number Theory and Computer Science, which encourages exceptional high school students from around the country to “think deeply about simple things”.

My teaching philosophy is to challenge students with deep and important ideas, and to give them hands-on learning experiences to explore those ideas. My experience is that students respond to challenge if the teacher makes clear the importance of the understanding they are seeking, and the benefit of the skills they are working to attain. I enjoy teaching motivated students at all levels, from high school to professional.

I love working individually with students, and have been blessed with great experiences working with talented students, both undergraduate and graduate. Mentoring students into effective researchers is a wonderful experience.

## Invited Talks

Before 2000 I did not track invited talks. I gave literally dozens of invited keynotes and panel talks at industry conferences from 1996 to 2000, as Chief Technology Officer of Net Perceptions.

Since 2000 I have given the following invited talks:

1. Knowledge Discovery in Databases, Panel on Personalization for Data Mining (2000)
2. Information and Content Management Conference, “The Future of Personalization for Content Management” (2000).
3. Goldman Sachs E-Commerce Conference, “Converting Browsers into Buyers with Personalization” (2000). Panel presentation to 1000+.
4. Personalization Summit, “The Future of Personalization” (2000)
5. Efficient Consumer Response Conference, “Personalization and Efficient Consumer Response” (2000). Keynote to 6000+ attendees at international conference in Turin, Italy.
6. IAAI Conference, Organized panel on “Personalization and Artificial Intelligence” (2001)

7. The University of Michigan Law School Law, Policy and the Convergence of Telecommunications and Computing Technologies Conference. Proceedings were published in a special issue of the Michigan Telecommunications and Technology Law Review (2001).
8. North Carolina State University “Recommender Systems Research” (2001)
9. The University of North Carolina “Recommender Systems Research” (2001)
10. Palo Alto Research Center “Recommender Systems Research” (2001)
11. Stanford University “Recommender Systems Research” (Digital Library Research Group) (2001)
12. New York University, “The Future of Personalization” (2001)
13. MIT Media Lab, “The Future of Personalization” (2001)
14. ACM KDD conference invited industry keynote, “The Future of Personalization” (2001)
15. Oxford University Internet Institute Personalization Workshop, “Recommender Systems for Personalization” (2004).
16. 2005 IEEE E-Commerce Conference keynote, “Security and Privacy Issues in Recommender Systems”
17. Unilever Corporate Research, “Recommender Systems for Community and Commerce” (2005).
18. AAAI 2005, “Overview of the IUI 2005 Conference”. (Presenting an overview of the conference in my role as co-Program Chair.)
19. AAAI 2005, “The best paper from IUI 2005”. (Presenting an accessible overview of the best paper in my role as co-Program Chair.)
20. University of Michigan, Computer Science, “Shilling Recommender Systems for Fun and Profit” (2005).
21. University of Michigan, STIET, “Recommenders in Commerce, Content, and Community” (2005).
22. Oregon State University, “Recommenders in Commerce, Content, and Community” (2005).
23. University of Minnesota, “Recommenders in Commerce, Content, and Community” (2005).
24. Carnegie Mellon University, “Recommenders in Commerce, Content, and Community” (2005).
25. International Conference on Emerging Trends in Information and Communication Security (ETRICS), Keynote “Security and Privacy Issues in Recommender Systems” (June 2006), Freiburg, Germany
26. University College, Dublin, “Helping Hands: Designing for Member-Maintained Communities” (Summer 2006)

27. University of Minnesota Headliner, “The Social Web” (October 2006)
28. Best Buy Corporate Headquarters, “The Social Web” (November 2006)
29. Yahoo! Research, “Helping hands: Designing for member-maintained communities” (March 2007)
30. PARC, “Helping hands: Designing for member-maintained communities” (March 2007)
31. Presentations to House and Senate committees in support of open document formats in state government. (March 2007)
32. CIC Library Conference, “The Social Web” (March 2007).
33. IBM Yorktown Research (simulcast to IBM Haifa and IBM Cambridge), “Helping hands: Designing for member-maintained communities” (March 2007).
34. Minnesota Library Association Academic and Research Librarian Day, Keynote, “The Social Web” (April 2007).
35. Unilever Corporate Research, “Creating Community with Recommender Systems”, UK (May 2007).
36. EDUCAUSE Research Conference, Boca Raton FL (December 2007).
37. PARC, “Creating Community with Recommender Systems”, Palo Alto (January 2008).
38. Unilever Research Symposium, “Recommender Systems and the Social Web”, Amsterdam (January 2008).
39. Midwest Library Technology Conference, Keynote, “Recommender Systems and the Social Web”, Minneapolis (May 2008).
40. Adaptive Hypermedia Conference, Keynote, “Altruism, Selfishness, and Destructiveness on the Social Web”, Hannover, Germany, July 2008.

- Ph.D. Theses Supervised**
- Shilad Sen, October 2008 (expected): *Tagging Recommenders*. Tenure-track assistant professor at Macalester College.
- Al Mamunur Rashid, February 2007: *Mining Influence in Recommender Systems*. Working for Intel as a data miner.
- Dan Cosley, July 2006: *Helping Hands: Design for Member-Maintained Online Communities*. Tenure-track assistant professor at Cornell University.
- Brad Miller, February 2003: *Toward a Personal Recommender System*. One of the founders of Net Perceptions. A tenure-track assistant professor at Luther College.
- Ben Schafer (co-advisor with Prof. Konstan), August 2001: *MetaLens: A Framework for Multisource Recommendations*. A tenured associate professor at University of Northern Iowa.
- Badrul Sarwar, February 2001: *Sparsity, Scalability and Distribution in Recommender Systems*. Working for shopping.com in data mining.
- Ed Chi, March 1999: *A Framework for Information Visualization Spreadsheets*. A researcher at Palo Alto Research Center. Ed's thesis was published as a book by Springer Verlag.
- Mike Stein, August, 1999: *Interconnecting Annotations of Software Artifacts*. Associate professor at Metro State University in the Twin Cities.
- Mark Claypool, August 1997 *Quality Planning for Distributed Collaborative Multimedia Applications*. A tenured associate professor at Worcester Polytechnic Institute.
- Don Johnson (co-advisor Prof. Lilja), June 1997: *A distributed hardware mechanism for process synchronization*. A tenure-track assistant professor at a small college in California.
- David Gardiner (co-advisor Prof. Slagle), February 1996: *Conceptual Relations in Information Retrieval*. One of the founders of Net Perceptions. A computer consultant in the Twin Cities.
- Vahid Mashayekhi, February 1995: *Distribution and Asynchrony in Concurrent Software Engineering*. Senior technical manager of the Enterprise Computing Solutions Group at Dell Computer.
- Paul Bieganski, February 1995: *Genetic Sequence Data Retrieval and Manipulation based on Generalized Suffix Trees*. Chief Technology Officer of Cargill Ventures.

**M.S.s Supervised**      Vahid Mashayekhi (1991), Dan Frankowski (1993), Mark Claypool (1993), Chris Feulner (1993), Michael Maley (1994), David Chavez (thesis; 1994), Ann Lundberg (1995), Carol Thompson (1995), Michael Stein (thesis; 1995), Ed Chi (1996), Nisha Agarwal (1996), Olaf Holt (1996), Hannu Huhdanpaa (1999), Mark O'Connor (2000), Irfan Ali (2002), Prateep Goplakrishnan (2003), Sree Kamireddy (2008).

## External Funding

1. NSF: "Understanding Online volunteer Communities: Toward Theory-Based Design", (PI John Riedl, co-PIs Joe Konstan, Loren Terveen, Mark Snyder, Yuqing Ren (all University of Minnesota) and Bob Kraut (Carnegie Mellon University). Funded for \$2,400,000 from August 2008 to August 2012.
2. Mellon: "EthicShare", (PI Jeff Kahn, co-PIs Wendy Pradt Lougee, John Butler, John Riedl). Funded for \$517,000 from Q1 2008 through Q3 2009.
3. NSF: "Enhanced Digital Libraries through Recommendation", (PI Joe Konstan, co-PIs John Butler and John Riedl). Funded for \$500,000 from Q1 2006 through Q1 2009.
4. NSF: "Helping Hands: Computer Support for Community-Maintained Artifacts of Lasting Value", (PI John Riedl, co-PIs Joe Konstan and Jeffrey Kahn). Funded for \$620,000 from November 2005 to November 2008.
5. NSF: "Designing On-Line Communities to Enhance Participation – Bridging Theory and Practice", (PI: Joseph Konstan; with Joseph Konstan and Loren Terveen, University of Minnesota, Robert E. Kraut and Sara Kiesler, Carnegie Mellon University, Paul Resnick and Yan Chen, The University of Michigan). Funded for \$2,000,000 for September 2003 to August 2008. The University of Minnesota share of the award is \$1,000,000.
6. NSF: "CISE Research Resources: Being There: Mobile Devices for Community and Commerce" (PI Loren Terveen; with Loren Terveen, Joseph Konstan, and Shashi Shekhar). Funded for \$120,000 for the period 9/1/02 through 8/31/04.
7. NSF: "Reading a Balanced Diet: Foraging in Information Communities" (PI Joseph Konstan; with Joseph Konstan). Funded for \$410,000 for the period September 1, 2001 to September 30, 2004.
8. NSF: "Research Instrumentation: Cluster Computing for Knowledge Discovery in Diverse Data Sets" (PI George Karypis; with George Karypis, Shashi Shekhar, and Maria Gini). Funded for \$74,516 for the period February 1, 2000 - January 31, 2003.
9. NSF: "Reflective GroupLens: Collaborative Filtering in Self-Aware Communities" (PI Joseph Konstan; with Joseph Konstan) (IIS-9978717). Funded September 1999 for \$303,264 for three years.

10. NETP: University research funds from Net Perceptions stock sale (PI John Riedl; with Joseph Konstan). (The University earned some money from Net Perceptions stock it owned from intellectual property licensed to the company. The GroupLens Research group gets a share of those funds to support ongoing research.) Endowment yielding approximately \$150,000–\$200,000 per year, beginning February 2000.
11. NSF: “GroupLens: Scalable Collaborative Filtering for the Internet” (PI John Riedl; with Joseph Konstan). Funded March 1997 for \$300,000 for three years.
12. Net Perceptions: “GroupLens Research” (PI John Riedl; with Joseph Konstan). Funded 1998 for \$60,000 for three years.
13. NSF: “Collaborative, Distributed Database for Brain Viewing” (PI John Carlis; with John Carlis, Joseph Konstan, Robert Elde). Funded July 1997 for \$519,992 for three years.
14. ICEM Systems: “Collaborative Annotation of Software Artifacts”. (PI John Riedl). Funded November 1997 for \$20,000 for one year.
15. AT&T: “GroupLens: An Open System for Collaborative Filtering of Netnews”. (PI John Riedl). Funded January 1996 for \$24,000 for one year.
16. ICEM Systems: “Collaborative Software Inspection”. (PI John Riedl). Funded October 1995 for \$6,000 for one year.
17. NSF: Graduate Research Traineeship: “Panning for Gold: Information Discovery on the Information Superhighway” (PI Ahmed Sameh; with Ahmed Sameh, Joseph Konstan, and Jaideep Srivastava). Funded August 1995 for \$550,000 for five years.
18. NSF: “A Montaged Confocal Image Database System”. Funded August 1995 for \$130,000 for one year (PI John Carlis; with John Carlis and Robert Elde).
19. NSF: “Information Processing for Arabidopsis cDNA Sequencing”. Funded October 1994 for \$900,000 for three years (PI John Riedl; with John Carlis and Ernest Retzel).
20. NSF: “Infrastructure and Tools for Distributed, Collaborative Software Engineering”. Funded October 1994 for \$184,000 over three years (PI John Riedl; with Prasun Dewan of University of North Carolina).
21. NSF: “Flexible Collaborative Software Engineering”. Funded June 1992 for \$50,000 over one year. (PI John Riedl). (Prasun Dewan of Purdue University was funded separately under the same proposal).
22. NSF: “Flexible Coordination in Collaborative Software Engineering”. Funded April 4, 1990 for \$160,000 over two years. (PI Prasun Dewan; with Prasun Dewan of Purdue University).

Participation in research proposals other than as PI: (i) ARL: Army High Performance Computing Research Center (multi-million dollar proposal funded 1994 for five years), Tezduyar and Sameh, PIs; (ii) NSF: Equipment (funded 1994 for \$400,000 with \$400,000 University match), Sameh and Kaveh PIs; (iii) NSF: Institutional Infrastructure (funded 1995 for several million dollars), Du and Woodward PIs.

## Refereed Journal Papers

- [1] Donald Johnson, David J. Lilja, and John Riedl. Circulating shared-registers for multiprocessor systems. *Journal of Systems Architecture*, 52(3):152–168, March 2006.
- [2] Brad N. Miller, Joseph A. Konstan, and John Riedl. Pocketlens: Toward a personal recommender system. *ACM Transactions on Information Systems*, 22(3):437–476, July 2004.
- [3] Jon Herlocker, Joseph Konstan, Loren Terveen, and John Riedl. Evaluating collaborative filtering recommender systems. *ACM Transactions on Information Systems*, 22(1):5–53, January 2004.
- [4] J.B. Schafer, J. Konstan, and J. Riedl. Electronic commerce recommender applications. *Data Mining and Knowledge Discovery*, January 2001.
- [5] Jon Herlocker, Joseph A. Konstan, and John Riedl. Empirical analysis of design choices in neighborhood-based collaborative filtering algorithms. *Information Retrieval*, 5:287–310, 2002.
- [6] Ed H. Chi, John T. Riedl, Elizabeth Shoop, and Phillip Barry. A novel visualization method for biological sequence similarity reports. *Journal of Electronic Imaging: Special Issue on Visualization and Data Analysis*, October 2000.
- [7] Ed H. Chi, John Riedl, Phillip Barry, and Joseph Konstan. Principles for information visualization spreadsheets. *IEEE Computer Graphics and Applications (Special Issue on Visualization)*, pages 30–38, July 1998.
- [8] Donald Johnson, David J. Lilja, John Riedl, and James Anderson. Low-cost, high-performance barrier synchronization on networks of workstations. *Journal of Parallel and Distributed Computing*, 40(1):131–137, 1997.
- [9] Joseph Konstan, Brad Miller, David Maltz, Jon Herlocker, Lee Gordon, and John Riedl. GroupLens: Collaborative filtering for usenet news. *Communications of the ACM*, March 1997. Special Issue on Recommendation Systems.
- [10] M. Claypool, J. Riedl, J. Carlis, G. Wilcox, R. Elde, E. Retzel, A. Georgeopolous, J. Pardo, K. Ugurbil, B. Miller, and C. Honda. Network requirements for 3d flying in a zoomable brain database. *IEEE JSAC Special Issue on Gigabit Networking*, 13(5):816–827, June 1995.
- [11] James Schnepf, Vahid Mashayekhi, John Riedl, and David Du. Closing the gap in distance learning: Computer supported, participative, media-rich education. *Educational Technology Review*, 1994.
- [12] Vahid Mashayekhi, Janet Drake, Wei-Tek Tsai, and John Riedl. Distributed, collaborative software inspection. *IEEE Software*, 10(5), September 1993.
- [13] John Riedl, Vahid Mashayekhi, Jim Schnepf, Mark Claypool, and Dan Frankowski. Suite-Sound: A system for distributed collaborative multimedia. *IEEE Transactions on Knowledge and Data Engineering*, August 1993.

- [14] Prasun Dewan and John Riedl. Towards concurrent software engineering. *IEEE Computer*, January 1993.
- [15] Bharat Bhargava, Enrique Mafla, and John Riedl. Experimental facility for kernel extensions to support distributed database systems. *International Journal of System Integration*, 3:5–21, 1993.
- [16] Bharat Bhargava, Enrique Mafla, and John Riedl. Communication in the Raid distributed database system. *International Journal on Computers and ISDN Systems*, 1991(21):81–92, 1991.
- [17] Bharat Bhargava and John Riedl. A model for adaptable systems for transaction processing. *IEEE Transactions on Knowledge and Data Engineering*, December 1989.
- [18] Bharat Bhargava and John Riedl. The RAID distributed database system. *IEEE Transactions on Software Engineering*, 16(6), June 1989.

### Refereed Conference Papers

Many of these conferences are highly selective, with acceptance rates below 25% of papers submitted. I report the selectivity below for those conferences for which I know it (most of the recent conferences).

- [1] Shilad Sen, F. Maxwell Harper, Adam LaPitz, and John Riedl. The quest for quality tags. In *GROUP '07: Proceedings of the 2007 international ACM conference on Supporting group work*, pages 361–370, New York, NY, USA, 2007. ACM. Acceptance rate: 29%.
- [2] Reid Priedhorsky, Jilin Chen, Shyong (Tony) K. Lam, Katherine Panciera, Loren Terveen, and John Riedl. Creating, destroying, and restoring value in wikipedia. In *GROUP '07: Proceedings of the 2007 international ACM conference on Supporting group work*, pages 259–268, New York, NY, USA, 2007. ACM. Acceptance rate: 29%.
- [3] Dan Cosley, Dan Frankowski, Loren Terveen, and John Riedl. Suggestbot: Using intelligent task routing to help people find work in wikipedia. In *Proceedings of the ACM 2007 Conference on IUI*, Honolulu, HI, 2007. Acceptance rate: 22%.
- [4] F. Max Harper, Dan Frankowski, Sara Drenner, Yuqing Ren, Sare Kiesler, Loren Terveen, Robert Kraut, and John Riedl. Talk amongst yourselves: Inviting users to participate in online conversations. In *Proceedings of IUI 2007*, Honolulu, HI, 2007. Acceptance rate: 22%.
- [5] Shilad Sen, Shyong K. Lam, Al Mamunur Rashid, Dan Cosley, Dan Frankowski, Jeremy Osterhouse, F. Maxwell Harper, and John Riedl. tagging, communities, vocabulary, evolution. In *Proceedings of the ACM 2006 Conference on CSCW*, Banff, Alberta, Canada, 2006. Acceptance rate: 22%.
- [6] Dan Frankowski, Dan Cosley, Shilad Sen, Loren Terveen, and John Riedl. You are what you say: Privacy risks of public mentions. In *Proceedings of SIGIR 2006*, Seattle, WA, 2006. Acceptance rate: 19%.

- [7] Dan Cosley, Dan Frankowski, Loren Terveen, and John Riedl. Using intelligent task routing and contribution review to help communities build artifacts of lasting value. In *Proceedings of ACM CHI*, Montreal, CA, 2006. Acceptance rate: 24%.
- [8] S. K. Lam, D. Frankowski, and J. Riedl. Do you trust your recommendations? an exploration of security and privacy issues in recommender systems. In *Proceedings of the 2006 International Conference on Emerging Trends in Information and Communication Security (ETRICS)*, Freiburg, Germany, 2006. Acceptance rate: *Invited*.
- [9] Dan Cosley, Dan Frankowski, Sara Kiesler, Loren Terveen, and John Riedl. How oversight improves member-maintained communities. In *Proceedings of ACM CHI*, Portland, OR, 2005. Acceptance rate: 25%.
- [10] Roberto Torres, Sean M. McNee, Mara Abel, Joseph A. Konstan, and John Riedl. Enhancing digital libraries with techlens+. In *Proceedings of the Fourth ACM/IEEE Joint Conference on Digital Libraries*, pages 228 – 237, June 2004. Acceptance rate: 30%.
- [11] Shyong K. Lam and John Riedl. Shilling recommender systems for fun and profit. In *World Wide Web Conference*, pages 393 – 402, New York, NY, 2004. Acceptance rate: 17%.
- [12] Dan Cosley, Shyong K. Lam, Istvan Albert, Joseph Konstan, and John Riedl. Is seeing believing? How recommender system interfaces affect users’ opinions. In *CHI*, 2003. Acceptance rate: 16%.
- [13] Brad Miller, Istvan Albert, Shyong K. Lam, Joseph A. Konstan, and John Riedl. Movielen unplugged: Experiences with a recommender system on four mobile devices. In *Proceedings of the 17th Annual Human-Computer Interaction Conference (HCI 2003)*, British HCI Group, Miami, FL, September 2003. Acceptance rate: 30%.
- [14] Sean McNee, Shyong K. Lam, Joseph A. Konstan, and John Riedl. Interfaces for eliciting new user preferences in recommender systems. In *Proceedings of the 9th International Conference on User Modeling (UM’2003)*, pages 178–188, June 2003. Winner of Best Student Paper Award. Acceptance rate: 25%.
- [15] Sean M. McNee, Shyong K. Lam, Joseph A. Konstan, and John Riedl. Interfaces for eliciting new user preferences in recommender systems. In *Proceedings of INTERACT ’03 IFIP TC13 International Conference on Human-Computer Interaction*, pages 176–183, September 2003. Acceptance rate: 34%.
- [16] Sean McNee, Istvan Albert, Dan Cosley, Prateep Gopalkrishnan, Shyong K. Lam, Al Mamunur Rashid, Joe Konstan, and John Riedl. On the recommendation of citations for research papers. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work*, 2002. CHI Letters 4(3). Acceptance rate: 20%.
- [17] Al Mamunur Rashid, Istvan Albert, Dan Cosley, Shyong K. Lam, Sean McNee, Joseph A. Konstan, and John Riedl. Getting to know you: Learning new user preferences in recommender systems. In *Proceedings of the 2002 International Conference on Intelligent User Interfaces*, pages 127–134, San Francisco, CA, February 2002. Acceptance rate: 30%.

- [18] J. Ben Schafer, Joseph Konstan, and John Riedl. Meta-recommendation systems: User-controlled integration of diverse recommendations. In *Proceedings of the ACM Conference on Information and Knowledge Management*, pages 43–51, MacLean, VA, November 2002. Acceptance rate: 25%.
- [19] Badrul Sarwar, George Karypis, Joseph Konstan, and John Riedl. Item-based collaborative filtering recommendation algorithms. In *WWW '01: Proceedings of the 10th International Conference on World Wide Web*, pages 285–295, Hong Kong, 2001. ACM Press. Acceptance rate: .
- [20] Mark O'Connor, Dan Cosley, Joe Konstan, and John Riedl. PolyLens: A recommender system for groups of users. In *Proceedings of the 2001 European Conference on Computer Supported Cooperative Work*, Bonn, Germany, September 2001. Acceptance rate: 19%.
- [21] Jon Herlocker, Joe Konstan, and John Riedl. Explaining collaborative filtering recommendations. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work*, 2000. CHI Letters 5(1). Acceptance rate: 18%.
- [22] Ed Huai-hsin Chi and John Riedl. Case study: Resource steering in a visualization system. In *Proceedings of VisSym00*, 2000. Acceptance rate: .
- [23] B. M. Sarwar, G. Karypis, J. A. Konstan, and J. Riedl. Analysis of recommender algorithms for e-commerce. In *ACM E-Commerce 2000*, pages 158 – 167, 2000. Acceptance rate: 18%.
- [24] J. Ben Schafer, Joseph Konstan, and John Riedl. Recommender systems in e-commerce. In *Proceedings of the ACM Conference on Electronic Commerce (EC '99)*, 1999. Acceptance rate: 29%.
- [25] Jon Herlocker, Joseph Konstan, Al Borchers, and John Riedl. An algorithmic framework for performing collaborative filtering. In *Proceedings of the 1999 Conference on Research and Development in Information Retrieval (SIGIR-99)*, August 1999. Acceptance rate: 25%.
- [26] Nathan Good, Ben Schafer, Joseph Konstan, Al Borchers, Badrul Sarwar, Jon Herlocker, and John Riedl. Combining collaborative filtering with personal agents for better recommendations. In *Proceedings of the 1999 Conference of the American Association of Artificial Intelligence (AAAI-99)*, July 1999. Acceptance rate: 25%.
- [27] Mark Claypool and John Riedl. The effects of high-speed networks on multimedia jitter. In *Proceedings of the 4th annual EUROMEDIA conference*, Munich, Germany, April 1999. Acceptance rate: .
- [28] Mike Stein, Mats Heimdahl, and John Riedl. A general framework for interconnecting annotations of software systems. In *Proceedings of the 22nd Annual International Computer Software and Applications Conference (CompSAC'98)*, Vienna, Austria, August 1998. Acceptance rate: .
- [29] Ed H. Chi and John T. Riedl. An operator interaction framework for visualization systems. In *Proceedings of the Symposium on Information Visualization '98*, pages 63–70. IEEE CS, October 1998. Research Triangle Park, North Carolina. Acceptance rate: .

- [30] Badrul Sarwar, Joseph Konstan, Al Borchers, Jon Herlocker, Brad Miller, and John Riedl. Using filtering agents to improve prediction quality in the GroupLens research collaborative filtering system. In *Proceedings of the 1998 Conference on Computer Supported Cooperative Work*, November 1998. Acceptance rate: 19%.
- [31] Ed Huai-hsin Chi, Phillip Barry, John Riedl, and Joseph Konstan. A spreadsheet approach to information visualization. In *Proceedings of the Symposium on Information Visualization '97*, pages 17–24,116. IEEE CS, 1997. Phoenix, Arizona. Acceptance rate: (Acceptance rate: 59%).
- [32] Bradley N. Miller, John T. Riedl, and Joseph A. Konstan. Experience with GroupLens: Making Usenet useful again. In *Usenix 1997 Conference*, Anaheim, January 1997. Acceptance rate: 31%.
- [33] Mike Stein, John Riedl, Soren Harner, and Vahid Mashayekhi. Experience with distributed, asynchronous software inspection. In *Proceedings of the International Conference on Software Engineering*, 1997. Acceptance rate: .
- [34] Ed Huai-hsin Chi, John Riedl, Elizabeth Shoop, John V. Carlis, Ernest Retzel, and Phillip Barry. Flexible information visualization of multivariate data from biological sequence similarity searches. In *Proc. IEEE Visualization '96*, pages 133–140, 477. IEEE CS, 1996. San Francisco, California. Acceptance rate: .
- [35] Ed Chi, Phil Barry, Elizabeth Shoop, John Carlis, Ernest Retzel, and John Riedl. Visualization of biological sequence similarity search results. In *IEEE Visualization Conference*, Atlanta, November 1995. Acceptance rate: .
- [36] D. Johnson, D. Lilja, and J. Riedl. A circulating active barrier synchronization mechanism. In *International Conference on Parallel Processing*, Oconomowoc Wisconsin, August 1995. Acceptance rate: .
- [37] Vahid Mashayekhi, Mike Maley, and John Riedl. User recovery of audio operations. In *International Conference on Multimedia Computing and Systems*, May 1995. Acceptance rate: .
- [38] E. Shoop, E. Chi, J. Carlis, P. Bieganski, J. Riedl, N. Dalton, T. Newman, and E. Retzel. Implementation and testing of an automated EST processing and analysis system. In Lawrence Hunter and Bruce Shriver, editors, *Proceedings of the 28th Annual Hawaii International Conference on System Sciences*, volume 5, pages 52–61. IEEE, IEEE Computer Society Press, 1995. Acceptance rate: .
- [39] Mark Claypool and John Riedl. Silence is golden? - The effects of silence deletion on the CPU load of an audio conference. In *Proceedings of the 1994 IEEE Multimedia Conference*, pages 9–18, Boston, May 1994. Acceptance rate: .
- [40] J. Carlis, J. Riedl, A. Georgopoulos, G. Wilcox, R. Elde, J. H. Pardo, K. Ugurbil, E. Retzel, J. Maguire, B. Miller, M. Claypool, T. Brelje, and C. Honda. A zoomable DBMS for brain structure, function and behavior. In *International Conference on Applications of Databases*, June 1994. Acceptance rate: .

- [41] D. Johnson, D. Lilja, and J. Riedl. A distributed hardware mechanism for process synchronization on shared-bus multiprocessors. In *1994 International Conference on Parallel Processing*, 1994. Acceptance rate: .
- [42] Vahid Mashayekhi, Chris Feulner, and John Riedl. CAIS: Collaborative Asynchronous Inspection of Software. In *The Second ACM SIGSOFT Symposium on the Foundations of Software Engineering*, December 1994. Acceptance rate: .
- [43] P. Bieganski, J. Riedl, J. Carlis, and E. Retzel. Generalized suffix trees for biological sequence data: Applications and implementation. In *Proceedings of the 27th Hawaii International Conference on System Sciences*, 1994. Acceptance rate: .
- [44] E. Shoop, J. Srivastava, P. Bieganski, John Riedl, and E. Retzel. An object-oriented genetics information system. In *1993 ACM Symposium on Applied Computing (special track on Biomolecular Computing)*, February 1993. Acceptance rate: .
- [45] Bharat Bhargava, Karl Friesen, Abdelsalam Helal, and John Riedl. Adaptability experiments in the RAID distributed database system. In *Proceedings of the IEEE Symposium on Reliability in Distributed Systems*, Huntsville, Alabama, October 1990. Acceptance rate: .
- [46] Bharat Bhargava, Enrique Mafla, and John Riedl. Communication in the Raid distributed database system. In *Proceedings of the International Phoenix Conference on Computers and Communications*, March 1990. Acceptance rate: .
- [47] Bharat Bhargava, Enrique Mafla, John Riedl, and Bradley Sauder. Implementation and measurements of an efficient communication facility for distributed database systems. In *Proceedings of the 5th IEEE Data Engineering Conference*, Los Angeles, CA, February 1989. Acceptance rate: .
- [48] Bharat Bhargava and John Riedl. Implementation of RAID. In *Proc. of the 7th IEEE Symposium on Reliability in Distributed Systems*, Columbus, Ohio, October 1988. Acceptance rate: .
- [49] Bharat Bhargava and John Riedl. A model for adaptable systems for transaction processing. In *Proceedings of the 4th IEEE Data Engineering Conference*, pages 40–50, Los Angeles, CA, February 1988. (This paper received the Outstanding Paper award at the conference. An extended version appeared in *IEEE Transactions on Knowledge and Data Engineering*, December, 1989.). Acceptance rate: .
- [50] Bharat Bhargava, Tom Mueller, and John Riedl. Experimental analysis of layered Ethernet software. In *Proc of the ACM-IEEE Computer Society 1987 Fall Joint Computer Conference*, pages 559–568, Dallas, Texas, October 1987. Acceptance rate: .
- [51] Bharat Bhargava and John Riedl. The design of an adaptable distributed system. In *Proc of IEEE COMPSAC 86*, pages 114–122, October 1986. Acceptance rate: .

## Books

- [1] John Riedl and Joseph A. Konstan. *Word of Mouse: The Hidden Marketing Power of Collaborative Filtering*. Warner Business Books, 2002.

## Book Chapters

- [1] Brad Miller, John Riedl, and Joe Konstan. GroupLens for Usenet: Experiences in applying collaborative filtering to a social information system. In C. Leug and D. Fisher, editors, *From Usenet to CoWebs: Interacting with Social Information Spaces*. Springer-Verlag, 2002.
- [2] Joseph A. Konstan and John Riedl. Recommender systems for the web. In V. Geroimenko and C. Chen, editors, *Visualizing the Semantic Web*. Springer Verlag, 2002.
- [3] Joseph A. Konstan and John Riedl. Collaborative filtering: Supporting social navigation in large, crowded infospaces. In K. Höök, D. Benyon, and A. J. Munro, editors, *Designing Information Spaces: The Social Navigation Approach*. Springer Verlag, 2002.
- [4] Prasun Dewan, Vahid Mashayekhi, and John Riedl. Infrastructure and tools for collaborative software engineering. In Tom Malone, Gary Olson, and John Smith, editors, *Coordination Theory and Collaboration Technology*. Lawrence Erlbaum Associates, 2001.
- [5] B. Sarwar, J. Konstan, and J. Riedl. Distributed recommender systems: New opportunities for internet commerce. In S. Rahman and R. Bignall, editors, *Internet Commerce and Software Agents: Cases, Technologies and Opportunities*. Idea Group Publishing, Hershey, PA, 2001.

## Refereed Short Papers

- [1] Joseph A. Konstan, Sean M. McNee, Cai-Nicolas-Ziegler, Roberto Torres, Nishikant Kapoor, and John T. Riedl. Lessons on applying automated recommender systems to information-seeking tasks. In *Proceedings of the AAAI National Conference*, Boston, MA, July 2006. Acceptance rate: .
- [2] Al Mamunur Rashid, Shyong (Tony) K. Lam, George Karypis, and John Riedl. Clustknn: A highly scalable hybrid model- & memory-based cf algorithm. In *WEBKDD 2006*, Philadelphia, Pennsylvania, August 2006. Acceptance rate: 41%.
- [3] Al Mamunur Rashid, Kimberly Ling, Regina D Tassone, Paul Resnick, Robert Kraut, and John Riedl. Motivating participation by displaying the value of contribution. In *Proceedings of the SIGCHI conference on Human Factors in computing systems (CHI 2006)*, pages 955–958, 2006. Short paper. Acceptance rate: .
- [4] Sara Drenner, F. Maxwell Harper, Dan Frankowski, John Riedl, and Loren Terveen. Insert movie reference here: A system to bridge conversation and item-oriented web sites. In *Extended Abstracts of the 2006 ACM Conference on Human Factors in Computing Systems (CHI 2006)*, 2006. Short paper. Acceptance rate: .

- [5] S.M. McNee, J. Riedl, and J.A. Konstan. Being accurate is not enough: How accuracy metrics have hurt recommender systems. In *Extended Abstracts of the 2006 ACM Conference on Human Factors in Computing Systems (CHI 2006)*, April 2006. Short paper. Acceptance rate: .
- [6] S.M. McNee, J. Riedl, , and J.A. Konstan. Making recommendations better: An analytic model for human-recommender interaction. In *Extended Abstracts of the 2006 ACM Conference on Human Factors in Computing Systems (CHI 2006)*, April 2006. Short paper. Acceptance rate: .
- [7] Brad Miller, Istvan Albert, Shyong K. Lam, Joseph A. Konstan, and John Riedl. MovieLens unplugged: Experiences with a recommender system on four mobile devices. In *Proceedings of the 2003 ACM Conference on Intelligent User Interfaces*, Miami, FL, January 2003. Poster paper. Acceptance rate: .
- [8] Ed Huai-hsin Chi, Joseph Konstan, Phillip Barry, and John Riedl. A spreadsheet approach to information visualization. In *Proc. of ACM Symposium on User Interface Software and Technology*, pages 79–80. ACM Press, 1997. (short paper). Acceptance rate: .
- [9] Mike Stein, Vahid Mashayekhi, John Riedl, and Soren Harner. Experience with distributed, asynchronous software inspection. In *Proceedings of the Computer Supported Cooperative Work Conference*, Boston, November 1996. Short paper. Acceptance rate: .

**Patents**

- U.S. Patent #6,496,832. Visualization Spreadsheet (with E. Chi, J. Konstan, P. Barry). Issued December 17, 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. Konstan). Issued December 25, 2001.
- 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. Konstan). 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. Konstan). Issued November 24, 1998.

**Media Coverage**

Quoted broadly in the media about the impact of recommender systems on society and commerce. The New York Times ran an article on our research on the ability of recommender systems to influence users in August 2003. The New Yorker magazine ran an article based on our recommender systems research on Oct 4, 1999. ABC Nightline ran a half-hour show based on MovieLens entitled “Soulmates” in Nov 1999. I was on NBC Nightly News with Tom Brokaw for a short piece on collaborative filtering in Nov 1999. Our research has also been covered in the Wall Street Journal, and Info World, among other places, over the years.

We made many radio “appearances” to promote our book “Word of Mouse” in 2002.

## University Service

### 1990-91

- Wrote the draft of newsgroup committee's report.
- Active member of graduate affairs committee.
- Provided C++ advice to undergraduate curriculum committee.

### 1991-92

- Co-chair of lab space committee (with Prof. Kumar).
- Provided feedback to undergraduate curriculum committee on new curriculum.

### 1992-93

- Active member of computing committee.
- Active member of head search committee.

### 1993-94

- Member of departmental advisory committee.
- Active member of curriculum committee.
- Participated in creating new Bachelor of Information Networking. Served as member of degree committee.

### 1994-95

- Member of departmental advisory committee.
- Active member of curriculum committee.
- Member of ad hoc committee on assigning space.

### 1995-96

- Member of departmental advisory committee.
- Active member of curriculum committee.

**1996-97**            During the 1996-97 school year I was on leave to found Net Perceptions.

**1997-98** During the 1997-98 school year I worked 1/3 time at the University. I participated to a limited extent in the curriculum committee.

### 1998-99

- Member of departmental advisory committee.
- Member of undergraduate studies committee.
- Active member of recruiting committee.
- Member of blue-chip recruiting committee.
- Member of Carlson School E-Commerce recruiting committee.

### 2000

- Active member of recruiting committee
- Chair of external affairs committee

### 2001

- Elected to the departmental advisory committee for 2001-2002 academic year.

- Member of University-wide software patent committee
- Colloquium chair

## 2002

- Member of curriculum committee
- Member of University-wide software patent committee
- Presentation to University of Minnesota Technology into Products meeting

## 2003

- Elected to the departmental advisory committee for 2003-2004 academic year
- Member of recruiting committee
- Member of University-wide software patent committee

## 2004

- Elected to the departmental strategic planning committee for 2004-2005.
- Member of recruiting committee.
- Member of head search committee.
- Member of University-wide software patent committee.

## 2005

- Chair of the departmental strategic planning committee for 2005-2006.
- Member of recruiting committee.
- Member of University-wide software patent committee.

## 2006

- Chair of the departmental strategic planning committee for 2006-2007.
- Member of the senior faculty evaluation committee.
- Member of the recruiting committee.

## 2007

- Chair of the recruiting committee 2007-2008.
- Member of the senior faculty evaluation committee.

## 2008

- Member of the departmental strategic planning committee.
- Chair of the curriculum revision committee.