

Amy Csizmar Dalal

CONTACT INFORMATION	Professor Carleton College Department of Computer Science 1 N College St. Northfield, MN 55057 USA	Work: +1-507-222-5632 E-mail: adalal@carleton.edu Twitter: @drcsiz WWW: cs.carleton.edu/faculty/adalal
RESEARCH INTERESTS	Computer networks; human-computer interaction (HCI); QoE (Quality of Experience) and QoS (Quality of Service); self-healing networks; network measurement and performance	
EDUCATION	Northwestern University , Evanston, IL Ph.D., Department of Electrical and Computer Engineering, December 1999 Dissertation title: <i>Characterization of User and Server Behavior in Web-Based Networks</i> Adviser: Scott Jordan Area of Study: Computer and Communication Networks M.S., Department of Electrical and Computer Engineering, December 1997 Project title: <i>Performance of a Cellular Digital Packet Data Network</i> Adviser: Michael Honig Area of Study: Computer and Communication Networks University of Notre Dame , Notre Dame, IN B.S., Electrical Engineering, May 1994	
PROFESSIONAL EXPERIENCE	Carleton College , Department of Computer Science Professor Department Chair Associate Professor Assistant Professor	Northfield, MN August 2017 to present September 2013 to June 2016 September 2010 to July 2017 September 2003 to August 2010
	Hewlett-Packard Laboratories Post-doctoral Researcher	Palo Alto, CA July 2000 to May 2003
	Northwestern University , Department of Electrical and Computer Engineering Research Assistant Instructor Teaching Assistant	September 1999 to December 1999 Fall 1998, Fall 1999 September 1995 to June 1999
	Gooitech Intern	Schaumburg, IL June 1998 to July 1998
	3Com Research intern	Mount Prospect, IL June 1997 to September 1997
	Ameritech Cellular Services Resident contractor Intern	Hoffman Estates, IL January 1995 to September 1996 June 1995 to September 1995

TEACHING
EXPERIENCE

Carleton College

Courses developed

- CS 099, Summer Computer Science Institute (Human-Computer Interaction)
- CS 100, Human-Centered Computing
- CS 100, Digital Storytelling
- CS 231, Computer and Network Security
- CS 344, Human-Computer Interaction
- CS 395, Peer-to-Peer and Multimedia Computing

Courses taught

- Carleton Summer Teaching Institute, "Computer Science: Java Language"
- CS 107, Explorations in Computer Science
- CS 111 (117), Introduction to Computer Science
- CS 201 (127), Data Structures
- CS 208 (207), Computer Organization and Architecture
- CS 257 (204), Software Design
- CS 331 (337), Computer Networks

Senior Comprehensive Exercise teams supervised

- | | |
|--|---------|
| Gamify Your (Mental) Health | 2017-18 |
| Northfield Youth Services Participation Tracking | 2017-18 |
| Humanitarian Free/Open Source Software Development | 2017-18 |
| Caring for Caregivers | 2015-16 |
| Privacy Manager | 2015-16 |
| Studying CMC Usage Patterns via Sensor Networks | 2015-16 |
| Gamify your Health (2 teams) | 2014-15 |
| UI Builder | 2014-15 |
| (Computing) Power to the People: Challenge.gov | 2012-13 |
| PyLearn: A Python Interpreter for Beginners | 2012-13 |
| Robot Tour Guide | 2010-11 |
| MemoryBox | 2009-10 |
| Search and Rescue Robots | 2008-09 |
| Learning through Gaming | 2008-09 |
| A "Smart" Firewall | 2005-06 |
| A Language to Construct Graphical User Interfaces | 2005-06 |
| Nym: A Secure Peer-to-Peer Network | 2004-05 |

Northwestern University

Instructor

- Engineering Analysis (ENGG B05-1)

Teaching Assistant

- Introduction to Numerical Methods and Fortran
- Introduction to Logic Design (with lab)
- Electronic circuits (major and non-major sections, with lab)

UNDERGRADUATE
RESEARCH
PROJECTS
SUPERVISED

- | | |
|---|--------------|
| Mental Models of Home Networks | 2018-present |
| 3 students, 2 sponsored by grants from the Towsley Fund at Carleton. | |
| Self-healing Home Networks | 2013-14 |
| 5 students, sponsored by grants from the Howard Hughes Medical Foundation, the Clare Booth Luce Foundation, and the Department of Computer Science at Carleton. | |

- Self-healing Networks** 2011
3 students, sponsored by grants from the Howard Hughes Medical Foundation, the Clare Booth Luce Foundation, and the Department of Computer Science at Carleton.
- Measuring the Quality of Experience of Internet Video in Real Time** 2008-2010
11 students, 6 of whom were sponsored by grants from the Howard Hughes Medical Foundation, the Clare Booth Luce Foundation, and the Department of Computer Science at Carleton.
- Prediction of Multimedia Stream Quality using Data Mining Techniques** 2005-2006
6 students, 4 of whom were sponsored by a grant from the Howard Hughes Medical Foundation.
Co-advised by Dave Musicant.
- Media Measurement Systems** 2005
2 students.
- Streaming Media Studies** 2004-2005
2 students.
- Measurement Methodology for Internet Audio and Video Streams** 2004
1 student, sponsored by a grant from the Howard Hughes Medical Foundation.

REFEREED
JOURNAL
PUBLICATIONS

Undergraduate authors listed in **bold**.

Publications available online at

<http://www.cs.carleton.edu/faculty/adalal/research/publications.php>

- [1] A. Csizmar Dalal. User-perceived Quality Assessment of Streaming Media Using Reduced Feature Sets. *ACM Transactions on Internet Technology*, 11(2), December 2011. doi:10.1145/2049656.2049660
- [2] A Csizmar Dalal. Digital Storytelling as a Gateway to Computer Science. *Journal of the Research Center for Educational Technology*, North America, 4, Nov. 2009. Available at: <http://rcetj.org/index.php/rcetj/article/view/31/37>.
- [3] A. Csizmar Dalal and S. Jordan. Optimal Scheduling in a Queue with Differentiated Impatient Users. *Performance Evaluation*, 59(1):73–84, January 2005. doi:10.1016/j.peva.2004.08.001
- [4] A. Csizmar Dalal and S. Jordan. An Optimal Service Ordering for a World Wide Web Server. *ACM SIGMETRICS Performance Evaluation Review*, 29(2):8–13, September 2001. doi:10.1145/572317.572319

REFEREED
CONFERENCE
PUBLICATIONS

- [5] A. Csizmar Dalal. A Framework for Self-Healing Home Networks. In: *Proceedings of the Tenth International Conference on Heterogeneous Networking for Quality, Reliability, Security, and Robustness (QShine)*, August 2014. (Short paper) doi:10.1109/QSHINE.2014.6928674
- [6] A. Csizmar Dalal. Systems Considerations in Real Time Video QoE Assessment. In: *Proceedings of the IEEE Workshop on Quality of Experience for Multimedia Communications (QoEMC)*, December 2012. doi:10.1109/GLOCOMW.2012.6477777
- [7] A. Csizmar Dalal, **A. Bouchard, S. Cantor, Y. Guo, A. Johnson**. Assessing QoE of On-Demand TCP Video Streams in Real Time. In: *Proceedings of the IEEE International Conference on Communications (ICC)*, June 2012. doi:10.1109/ICC.2012.6364073
- [8] **H. French, J. Lin, T. Phan**, A. Csizmar Dalal. Real Time Video QoE Analysis of RTMP Streams. In: *Proceedings of the 30th IEEE International Performance Computing and Communications Conference (IPCCC)*, November 2011. (Poster paper.) doi:10.1109/PCCC.2011.6108105

- [9] A. Csizmar Dalal. Revisiting a QoE Assessment Architecture Six Years Later: Lessons Learned and Remaining Challenges. In: *Proceedings of the Third International Workshop on Advanced Architectures and Algorithms for Internet Delivery and Applications (AAA-IDEA)*, November 2009. (**Invited paper.**) doi:10.1007/978-3-642-10625-5_46
- [10] A. Csizmar Dalal, **E. Kawaler, S. Tucker**. Towards Real-Time Stream Quality Prediction: Predicting Video Stream Quality from Partial Stream Information. In: *Proceedings of The Sixth International ICST Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine)*, November 2009. doi:10.1007/978-3-642-10625-5_2
- [11] A. Csizmar Dalal, **J. Olson**. Feature Selection for Prediction of User-Perceived Streaming Media Quality. In: *Proceedings of the 2007 International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS)*, July 2007.
- [12] A. Csizmar Dalal, D. Musicant, **J. Olson, B. McMenemy, S. Benzaid, B. Kazez, E. Bolan**. Predicting User-Perceived Quality Ratings from Streaming Media Data. In: *Proceedings of the IEEE International Conference on Communications (ICC 2007)*, June 2007. doi:10.1109/ICC.2007.20
- [13] A. Csizmar Dalal, **K. Purrington**. Discerning user-perceived media stream quality through application-layer measurements. In: *Proceedings of the First International Conference on Multimedia Services Access Networks (MSAN 2005)*, June 2005, pp. 44-48. doi:10.1109/MSAN.2005.1489940
- [14] A. Csizmar Dalal, E. Perry. A New Architecture for Measuring and Assessing Streaming Media Quality. In: *Proceedings of the Third Workshop on Passive and Active Measurements (PAM 2003)*, April 2003.
- [15] S. Banerjee, J. Brassil, A. Csizmar Dalal, S. J. Lee, E. Perry, P. Sharma, A. Thomas. CDNs for Personal Broadcasting and Individualized Reception. In: *Proceedings of the Seventh International Web Content Caching and Distribution Workshop (WCW2002)*, August 2002.
- [16] A. Csizmar Dalal and S. Jordan. Improving User-Perceived Performance at a World Wide Web Server. In: *Proceedings of Globecom*, November 2001. doi:10.1109/GLOCOM.2001.966220
- [17] J. Davis, J. Albrecht, C. Alvarado, T. Chen, A. Csizmar Dalal, S. Lee. Computer science faculty careers at liberal arts colleges. *XRDS*, 21(3):13–15, March 2015. doi:10.1145/2730918
- [18] S. Hambrusch, R. Libeskind-Hadas, F. Zhao, D. Rabson, A. Csizmar Dalal, E. Fox, C. Isbell, V. Taylor. Exploring the baccalaureate origin of domestic Ph.D. students in computing fields.. *Computing Research News*, 25(1), January 2013.
- [19] A. Csizmar Dalal and D. Musicant. Engaging Students in Research: Building Community in Computer Science. *Building Intellectual Community Through Collaboration*. C. Rutz and M. Savina, ed. Northfield, Minnesota: College City Publications, 2007, pp. 121–139.
- [20] A. Csizmar. *Characterization of User and Server Behavior in Web-based Networks*. Ph.D. dissertation, Northwestern University, Evanston, IL, December 1999.
- [21] A. Csizmar Dalal. *Performance of a Cellular Digital Packet Data Network*.. M.S. project report, Northwestern University, Evanston, IL, December 1997.

OTHER
PUBLICATIONS

TECHNICAL
REPORTS

- [22] A. Csizmar Dalal, D. Musicant, **J. Olson**, and **E. Bolan**. Mining Streaming Media Data to Predict User-Perceived Quality Rankings. 2005.
- [23] **E. Bolan**, A. Csizmar Dalal, D. Musicant, and **J. Olson**. Predicting Multimedia Streaming Quality by Mining TCP/IP Data. 2005.
- [24] S. Banerjee, J. Brassil, A. Csizmar Dalal, S. J. Lee, E. Perry, P. Sharma, A. Thomas. Multi-stream Media Services. HPL Technical Report HPL-2002-207, July 2002.
- [25] A. Csizmar Dalal and E. Perry. An Architecture for Streaming Media Quality Assessment. HPL Technical Report HPL-2002-142. 2002.
- [26] A. Csizmar Dalal and E. Perry. An Architecture for Client-side Streaming Media Quality Assessment. HPL Technical Report HPL-2002-90, April 2002.
- [27] A. Csizmar Dalal and E. Perry. Client-side Quality Assessment of Streaming Media. HPL Technical Report HPL-2002-80, April 2002.
- [28] A. Csizmar. Technical Specification for the WECp 2.x [and 3.0] Protocol[s]". Gooitech, Inc., June 1998.
- [29] A. Csizmar, I. Sidhu, J. Mahler. Source Characterization of H.323 Multimedia Traffic. Advanced Technologies Research Center, Carrier Systems Business Unit, 3Com, February 1998.
- [30] A. Csizmar. CDPD Security Issues. White paper, Ameritech Cellular Services, June 1996.

PRESENTATIONS
AND INVITED
TALKS

- [31] Things I Wish I'd Known. (Panel presentation). To appear at the *ACM Richard Tapia Celebration of Diversity in Computing*, Orlando, FL, September 2018.
- [32] Balancing the Demands in Academia (Teaching, Research, and Service). (Session, with M. Gini.) Presented at the Computing Research Association Women (CRA-W) Workshop for Assistant Professors and Senior Graduate Students at the *Grace Hopper Celebration of Women in Computing*, Houston, TX, October 2016.
- [33] Diversity and Inclusion Efforts in the Faculty at Liberal Arts Colleges. (Poster) Presented at the *ACM Richard Tapia Celebration of Diversity in Computing*, Austin, TX, September 2016.
- [34] A Framework for Self-Healing Home Networks. (Poster) Presented at the *Tenth International Conference on Heterogeneous Networking for Quality, Reliability, Security, and Robustness (QShine)*, Rhodes, Greece, August 2014.
- [35] Faculty Careers at Liberal Arts Colleges: Myths and Reality. (Panel presentation) Presented at the *Grace Hopper Celebration of Women in Computing*, Minneapolis, MN, October 2013.
- [36] Self-Healing Home Networks: Challenges and Opportunities. Presented at the Mathematics, Statistics, and Computer Science Seminar, Macalester College, September 10, 2013. A shorter version of this talk was also presented at the Carleton College Faculty Retreat on September 10, 2013.
- [37] System Considerations in Real Time Video QoE Assessment. Presented at the *IEEE Workshop on Quality of Experience for Multimedia Communications (QoEMC)*, Anaheim, CA, December 2012.
- [38] Assessing QoE of On-Demand TCP Video Streams in Real Time. (Poster) Presented at *ICC 2012*, Ottawa, Ontario, Canada, June 2012

- [39] Real Time Video QoE Analysis of RTMP Streams. (Poster). Presented at the *30th IEEE International Performance Computing and Communications Conference (IPCCC)*, Orlando, FL, November 2011.
- [40] Building Bridges and Breaking Barriers: Panel on Diversity and Inclusion in Computer Science Education. (Panel presentation) Presented at the *Grace Hopper Celebration of Women in Computing*, Atlanta, GA, October 2010.
- [41] Revisiting a QoE Assessment Architecture Six Years Later: Lessons Learned and Remaining Challenges. Presented at the *Third International Workshop on Advanced Architectures and Algorithms for Internet Delivery and Applications (AAA-IDEA)*, Las Palmas de Gran Canaria, Spain, November 2009.
- [42] Towards Real-Time Stream Quality Prediction: Predicting Video Stream Quality from Partial Stream Information. Presented at the *Sixth International ICST Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine)*, Las Palmas de Gran Canaria, Spain, November 2009.
- [43] Feature Selection for Prediction of User-Perceived Streaming Media Quality. Presented at *SPECTS 2007*, San Diego, CA, July 2007.
- [44] Predicting User-Perceived Quality Ratings from Streaming Media Data. Presented at *ICC 2007*, Glasgow, Scotland, June 2007.
- [45] Formal, Informal, Stealth? Mentoring Strategies for Women in Computer Science. Invited talk, Associated Colleges of the Midwest FaCE Project Women in Science Networking Seminar, Coe College, March 2006.
- [46] Life Isn't Fair: Deriving Optimal Scheduling Policies for Computer/Communication Systems. Invited talk, Summer Mathematics Program for Women, Carleton College, July 2005.
- [47] Discerning User-Perceived Media Stream Quality Through Application-Layer Measurements. Presented at *MSAN 2005*, Orlando, Florida, June 2005.
- [48] A Novel Framework for Measuring and Assessing Streaming Media Quality. Invited talk, Department of Mathematics, Statistics, and Computer Science, St. Olaf College, April 2005.
- [49] Streaming Audio and Video over the Internet: Challenges and Pitfalls. Invited talk, Department of Mathematics and Computer Science, Gustavus Adolphus College, September 2004. Also given as an invited talk at the Department of Mathematics, Statistics, and Computer Science at St. Olaf College, April 2005. A shorter version of this talk was given at Carleton College in August 2004 to the Summer Science Research Program.
- [50] A New Architecture for Measuring and Assessing Streaming Media Quality. (Poster) Presented at *PAM 2003*, La Jolla, CA, April 2003.
- [51] CDNs for Personal Broadcasting and Individualized Reception. Presented at the *Seventh International Web Content Caching and Distribution Workshop (WCW 2002)*, Boulder, CO, August 2002.
- [52] An Architecture for Client-side Streaming Media Quality Assessment. Internal presentation, Internet Systems and Storage Lab, HP Labs, April 2002.
- [53] Improving User-perceived Performance at a World Wide Web Server. Presented at *Globe-com 2001*, San Antonio, TX, November 2001.

[54] An Optimal Service Ordering for a World Wide Web Server. Presented at *Performance and Architecture of Web Servers Workshop (PAWS) 2001*, Cambridge, Massachusetts, June 2001. An earlier version was presented at the *Fifth INFORMS Telecommunications Conference*, Boca Raton, FL, March 2000.

[55] Strategies for Becoming an Effective Engineering Teaching Associate: A Workshop for New Engineering TAs. Presented at orientation for new teaching assistants, Northwestern University, September 1998.

PATENTS

[56] US Patent 8,464,353, "Method and System for Content Downloads via an Insecure Communications Channel to Devices" (with David Andrew Thomas, Puneet Sharma, Sujata Banerjee, and Sung-Ju Lee), awarded June 11, 2013.

[57] US Patent 7,216,165, "Streaming Media Quality Assessment System" (with Ed Perry), awarded May 8, 2007.

SOFTWARE PRODUCTS

[58] National Center for Women in Information Technology (NCWIT) Member Activity and Change Tracker. Worked with a team of software engineers on the project's vision, testing, and deployment. Available online at <https://www.ncwit.org/activities>.

GRANTS AND AWARDS

[1] Carleton College Curriculum Development Grant, Summer 2017: develop curricular and evaluative materials to allow for student participation in a humanitarian free and open source software (HFOSS) development project as their senior comprehensive exercise in computer science.

[2] Travel award: Professor's Open Source Software Experience (POSSE) Workshop, Raleigh, NC, November 17-19, 2016.

[3] Carleton College Hughes Summer Research Opportunity Grant, from the Howard Hughes Medical Institute Foundation: Summer 2014 (two students, 5 weeks), Summer 2013 (two students, 5 weeks), Summer 2011 (one student, ten weeks), Summer 2010 (one student, ten weeks), Summer 2008 (two students, five weeks), Summer 2006 (one student, five weeks), Summer 2005 (two students, ten weeks, with Prof. David Musicant), Summer 2004 (one student, ten weeks).

[4] Clare Booth Luce Program: institutional grant with the department of Physics and Astronomy, to support 8 undergraduate research students for three years, 2010-2013.

[5] Travel award: CRA-W CAPP Advanced Career Mentoring Workshop, Providence, RI, June 25-26, 2010

[6] Carleton College Howard Hughes Medical Institute Curricular Development Grant, Summers 2010 and 2011: develop two linked courses, one in Psychology and one in Computer Science, on human-computer interaction.

[7] Carleton College Bush Fellowship Grant, 2006-2007: one term of funding for my continued work on streaming media quality analysis.

[8] Carleton College Curricular Development Grant, Summer 2005, awarded by QUIRK (funding from the U.S. Department of Education FIPSE Grant): increase quantitative reasoning course material in CS107.

PROFESSIONAL SERVICE

Organizational leadership and representation

- Institutional representative to the National Center for Women in Information Technology Academic Alliance, 2011-present.

- Department representative, Liberal Arts College Association for Faculty Inclusion, 2013-present. Also: career booth organizer at the Grace Hopper Celebration of Women in Computing in 2014 and 2016, and at the Richard Tapia Celebration of Computing in 2016.
- Team leader, Recruitment and Engagement Team, National Center for Women in Information Technology Academic Alliance, 2012-2014.
- Member, CRA-E (Computing Research Association Education Committee), 2012-2015.
- Membership chair and founding member, Santa Clara Valley chapter, IEEE Women in Engineering (WIE), 2002-2003.

Carleton College leadership and elected positions

- Director, Science Fellows Program, 2017-present.
- Member, Community and Civic Engagement Committee, 2017-present.
- Member, Interim Math-Science Group, 2018.
- Department Chair, Computer Science Department, 2013-2016.
- Faculty Grants Committee (elected position), 2014-2016.
- Community, Equity, and Diversity Initiative (CEDI) leadership board as Sexual Misconduct Committee Co-Chair, 2012-2013.
- Co-director and program mentor, Clare Booth Luce Scholars, 2010-2011.
- Education and Curriculum Committee, At-Large Representative (elected position), 2009-2011.

Conference leadership

- Posters committee co-chair, Grace Hopper Celebration of Women in Computing, 2016, 2017.
- Mentoring program co-chair, Networking Networking Women Conference (N2Women), 2014.
- Co-chair, MinneWIC, regional women in computing conference, 2010 (inaugural year).

Program committees

- International Conference on Quality of Multimedia Experience (QoMEX), 2018.
- IEEE/IFIP International Workshop on QoE Centric Management (QCMan), 2013, 2015, and 2016.
- Posters track, Grace Hopper Celebration of Women in Computing, 2013.
- Performance and Reliability Track, International World Wide Web Conference (WWW), 2003.

Review panels and referee service

- Judge, ACM Student Research Competition at the 2015, 2013, 2011, and 2008 Grace Hopper Celebrations of Women in Computing, and at SIGCSE 2018.
- External reviewer, Grinnell College Computer Science Department, 2018 (upcoming).
- External reviewer, Rhodes College Department of Mathematics and Computer Science, 2017.
- External reviewer, Washington and Lee University Computer Science Department, 2017.
- External reviewer, Simpson College Computer Science Department, 2013.
- External reviewer for one tenure case (2012) and one mid-tenure review (2015).
- Panelist, NSF, 2013-14.
- Panelist, NSF Graduate Research Fellowship Program, 2007-2011, 2013.
- CRA Undergraduate Research Awards Committee, 2011, 2012-13.
- Reviewer, SIGCSE 2018.
- Reviewer, IET Networks, 2017.
- Reviewer, IEEE Transactions on Circuits and Systems for Video Technology, 2012.
- Reviewer, Morgan Kaufmann, 2012.
- Reviewer, Springer Science+Business Media, 2011.

- Reviewer, ISA Transactions, 2007, 2009.
- Reviewer, IEEE Transactions on Computers, 2004.
- Reviewer, Simulation Modeling Practice and Theory, 2004.
- Reviewer, the Cooperative Grants Program of the U.S. Civilian Research and Development Foundation, 2004.
- Reviewer, the IEEE International Conference on Communications (ICC), 2003.
- Reviewer, the Fourth International Conference on Mobile Data Management (MDM), 2003.
- Reviewer, IEEE INFOCOM, 2002.

College service activities

- Member, Community and Civic Engagement Committee, 2017-present.
- ACM-W student chapter faculty advisor, 2016-present.
- Comps czar, Computer Science department, 2012-13 academic year; 2017-18 academic year.
- Summer Computer Science Institute Faculty, 2013-2015, 2017.
- Mellon-Mays Fellow mentor, 2014-2016.
- New faculty mentor, 2012-2014.
- TRIO/OIIL faculty mentor, 2012-2014.
- Department assessment coordinator, 2011-2013.
- Panelist, “LTC Lunch: ACE at Carleton: How well are we doing and what can we do better?”, October 2017.
- Panelist, “LTC Lunch: Collaborative Learning Across the Curriculum”, October 2015.
- Presenter, “LTC Lunch: Our Dyad Adventure”, October 2012.
- Panelist, success panel for new students, September 2011.
- Panelist, “LTC Lunch: The Past, Present, and Futures of Grade Inflation”, May 2011.
- Panelist, Gender in Academia Panel, May 2010.
- Institutional representative, University of Michigan’s Institute on Intergroup Relations, July 2009.
- Member, Junior Faculty Affairs Committee, 2008-2009.
- Co-organizer, Women’s Fall Faculty Meeting, October 2005.
- Member, Student Fellowships Committee, 2005-2006.
- Member, Visuality Initiative, 2004-2006.
- Member, Transitions in the Sciences Committee, 2004-2008.
- Academic advisor to 21 students.
- Student ACM Chapter Faculty Advisor, 2004-2005.
- Sophomore Writing Portfolio reader, June 2004.

Outreach and mentoring

- Blogger, This is What a Computer Scientist Looks Like, August 2009-present.
- Contributing editor, Small Pond Science, June 2014-present.
- Girl Scout Troop Leader, Brownies (2014-2016), Juniors (2016-2018), Cadettes (2018-present).
- E-mentor, Julia Morgan School for Girls, 2003-2006.
- MentorNet email mentor, 2000-2003.

HONOR AND PROFESSIONAL SOCIETY MEMBERSHIPS

Tau Beta Pi (engineering honor society)
 Eta Kappa Nu (electrical engineering honor society)
 Association for Computing Machinery (ACM): special interest groups in Computer-Human Interaction (SIGCHI), Computer Science Education (SIGCSE); Women in Computing (ACM-W).

MEDIA QUOTATIONS

“Keeping Technology Real”, Carleton College *Voice*, Winter 2015. https://apps.carleton.edu/voice/?story_id=1244593&issue_id=1198761§ion_id=353603

“Where Are All the Women Scientists?”, Becky Oskin, New Scientist online, April 26, 2011. <http://www.newscientist.com/article/dn20416-where-are-all-the-women-scientists.html?full=true>

“Too Much Information?”, Erin Peterson, Carleton College *Voice*, Spring 2009. https://apps.carleton.edu/voice/?story_id=576788&issue_id=576203

“Different Kind of Matchmaking”, Becky Bartindale, San Jose (CA) Mercury News, June 10, 2003.