Dr. VALERIE B. BARR
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https://vbarr4.github.io/

EXPERIENCE
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CURRENT POSITION

Margaret Hamilton Distinguished Professor of Computer and Director of the Bard Network Computing Initiative [2022 – present]

ADMINISTRATIVE POSITIONS

PROGRAM DIRECTOR, DATA ANALYTICS CONCENTRATION, BARD COLLEGE [2023 – present]
- Developed proposal and initial curriculum, shepherded it through approval process
- Lead DA faculty, build interdisciplinary connections across campus
- Advise DA students

DEPARTMENT CHAIR, COMPUTER SCIENCE, MOUNT HOLYOKE COLLEGE [2017 – 2021]

- Led programmatic and curricular modifications, including revision of the introductory sequence, significant modifications to the use of student teaching assistants.
- Updated and enhanced department lab facilities.
- Co-lead of Data Science program, finalized and shepherded through approval of the curriculum for new Data Science major, launched September 2019.

CHAIR – ASSOCIATION OF COMPUTING MACHINERY COUNCIL ON WOMEN IN COMPUTING [2012 – 2017, Past Chair 2017-2022]

ACM is the largest scientific membership organization in the world, with 90,000 members in over 100 countries. Over 40,000 of these identify as members of ACM-W, the ACM Council on Women in Computing. During my time as Chair I:
- Led a strategic planning process to update and refocus ACM-W's goals and mission.
- Restructured ACM-W's committees in order to revitalize activities to support, celebrate, and advocate for women in computing.
- Oversaw a revamping of all communications, including web, newsletter, social media.
- Oversaw key programs including over 30 celebrations of women in computing, over 180 chapters worldwide, and a scholarship program that awards approx. $40,000 annually.
- Established relationships with partners in India, Europe, Canada, Cuba, Philippines, and the Arab countries.
- Launched a new focus on community college students and faculty.
- Secured donations for ACM-W programs from several top technology companies, along with significant increase in funds provided directly by ACM.

PROGRAM DIRECTOR, NATIONAL SCIENCE FOUNDATION [Aug. 2013 – Aug. 2014]

Involved in long-range planning and budget development for areas represented within the Division of Undergraduate Education; management of the merit review, award, and declination process for four key programs within the division; post-award management; coordination with other divisions and programs within NSF; contribute to the development of long-range plans for the Educational and Human Resources Directorate.

DIRECTOR OF INTERDISCIPLINARY PROGRAMS, UNION COLLEGE [2011 – 2013]

Developed and led strategic interdisciplinary initiatives and provided operational oversight of nineteen interdisciplinary programs. Worked closely with the Dean of Academic Departments and Programs and with individual program directors to set policy that strengthened Union's interdisciplinary efforts.

DEPARTMENT CHAIR, COMPUTER SCIENCE, UNION COLLEGE [2004 – 2012]

- Undertook significant programmatic and curricular modifications, developed new computational methods minor, worked with faculty from 15 departments on computing initiatives.
- Hired many new faculty, increased enrollments in major level courses by 47%, tripled number of distinct majors represented in introductory courses, tripled percentage of women in introductory courses, increased introductory course enrollments 10-fold.
- Created new digital art program, in collaboration with Visual Arts Department. Secured donations from alumni of equipment for new digital art classroom/laboratory.
- Fostered strategic collaborations between Computer Science and Humanities, Social Sciences, Sciences, and Engineering.
- Secured new Computer Science laboratory space to enhance departmental research and educational activities.

PREVIOUS FACULTY APPOINTMENTS

2017 – 2022	Professor	Mount Holyoke College
2004 – 2017	Professor	Union College
2000 – 2004	Associate Professor	Hofstra University
1999 – 2001	Visiting Research Scholar	Columbia University
1996 – 2000	Assistant Professor	Hofstra University
1995 – 1996	Instructor	Hofstra University
1994 – 1995	Visiting Assistant Professor	Polytechnic University of NY
1991 – 1992	Visiting Instructor	Mount Holyoke College
1989 – 1991	Teaching Asst. & Lecturer	Rutgers University
1987 – 1989	Assistant Professor	Pratt Institute

OTHER PROFESSIONAL POSITIONS

1986 – 1987	Systems Analyst	APT Development
1985 – 1986	Consultant	AT&T Bell Laboratories
1982 – 1985	Microsoftware Manager	Supreme Equipment Corp.

| 1980 – 1982 | Staff Consultant | Dubner Computer Systems |
| 1979 – 1980 | Systems Analyst | Exxon Corporation |

EDUCATION

Ph.D.	Rutgers University	May 1996	Computer Science
M.S.	New York University	May 1979	Computer Science
B.A.	Mount Holyoke College	May 1977	Applied Mathematics

AWARDS

American Association for the Advancement of Science Fellow, 2022

Association for Computing Machinery Distinguished Member, 2019.

Association for Computing Machinery 2016 Award for "Outstanding Contributions to ACM"

GRANTS

"The Alliance for Identity-Inclusive Computing Education (AIICE): A Collective Impact Approach to Broadening Participation in Computing", National Science Foundation, $182,346 (Duke University, lead institution, total award $10,000,000).

"Evaluating Frameworks for Incorporating Computing Across the Curriculum", National Science Foundation (February 2020 – July 2022), $146,644 (Lead institution, with Colby College and Union College, total award $350,000)

"The Data Science WAV: Experiential Learning with Local Community Organizations", National Science Foundation, $135,858 (linked with Amherst College, Hampshire College, Smith College, and the University of Massachusetts-Amherst).

"Campus Wide Computation Initiative - A New Model for Computing Education," National Science Foundation (August 2007 - July 2013), $706,578

 "Investigating the Utility of High-Performance Computing Capabilities at Six Small Liberal Arts Colleges," Teagle Foundation, (January 2009 - January 2010), $40,000.

"Social Robotics," National Science Foundation, (August, 2007 to July, 2011), $326,752.

"Software Evaluation: The Application of Software Testing Techniques to Rule-Based Natural Language Processing Components", National Science Foundation (August, 1999 - January, 2001), $74,832.

PUBLICATIONS AND PRESENTATIONS

JOURNAL PUBLICATIONS

Barr, V., Brodley, C., Perez-Quiñones, M. "Visualizing Progress in Broadening Participation in Computing: The Value of Context". *Communications of the ACM,* under review.

Legacy, C., Zieffler, A., Baumer, B., Barr, V. & Horton, N. "Facilitating Team-Based Data Science: Lessons Learned from the DSC-WAV Project". *Foundations of Data Science*, Feb 2022. DOI: 10.3934/fods.2022003

Beaury, E., Finn, J., Corbin, J., Barr, V., & Bradley, B. "Biotic resistance to invasion is ubiquitous across ecosystems of the U.S.", *Ecology Letters*, 2019, DOI: 10.111/ele.13446

Barr, V. and Zdravko Markov, eds., *International Journal of Artificial Intelligence Tools (IJAIT),* Special Issue on Selected Papers from the 17th International FLAIRS Conference (FLAIRS-2004), Vol 14, No. 1 & 2, February & April 2005.

Gonzalez, A. and Barr, V*., "*Validation and verification of intelligent systems – what are they and how are they different?", Journal of Experimental and Theoretical Artificial Intelligence, Vol. 12, No. 4, 2000.

Barr, V., "Applications of rule-base coverage measures to expert system evaluation", Journal of Knowledge Based Systems**,** Vol. 12, pp. 27-35, 1999.

CONFERENCE PUBLICATIONS

Barr, V., Brodley, C., Guzdial, M., Gunter, E., Libeskind-Hadas, R., Manaris, W. "CS + X: Approaches, Challenges, and Opportunities in Developing Interdisciplinary Computing Curricula", submitted.

Holland-Minkley, A., Barnard, J., Barr, V., Braught, G., Davis, J., Reed, D., Schmitt, K., Tartaro, A., Teresco, J. "Computer Science Curricular Guidelines: A New Liberal Arts Perspective", submitted.

Striegnitz, K., Barr, V., Maxwell, B., Webb, N., Taylor, S., Li, Y. "Computing in Classes Outside of Computer Science: What Core Computing Concepts Should Students Learn?", submitted.

Barr, V., "Create Two, Three, Many Courses: An Experiment in Contextualized Introductory Computer Science", Proceedings of Consortium for Computing in Colleges – Northeast Region (CCSCNE-2012), Hamden, CT, 2012.

Barr, V., "A Proposed Model for Effective Verification of Natural Language Generation Systems", Proceedings of Florida Artificial Intelligence Research Society Conference, St. Augustine, FL, 2003.

Barr, V., "A Quagmire of Terminology: Verification & Validation, Testing, and Evaluation", Proceedings of Florida Artificial Intelligence Research Society Conference, Key West, 2001.

Harmon, S.Y., Hoffman, C.W.D., Gonzalez, A. J., Knauf, R., and Barr, V*., "*Validation of Human Behavior Representations", Proceedings of Foundations for Modeling and Simulation, Verification and Validation in the 21st Century, Laurel, MD, 2002.

Barr, V., "Applying reliability engineering to expert systems", Proceedings of Florida Artificial Intelligence Research Society Conference, Orlando, FL, 1999.

Barr, V., "Software testing across the curriculum", Proceedings of Eastern Small College Computing Conference, Poughkeepsie, NY, 1998.

Barr, V., "Applications of rule-base coverage measures to expert system evaluation", Proceedings of American Association of Artificial Intelligence AAAI-97, Providence, RI, 1997.

Barr, V., "Application of control flow and data flow analysis to rule-based systems", Annals of Software Engineering, Vol. 4, pp. 171-189, 1997.

Barr, V., "Rule-based system testing with control and data flow techniques", Proceedings of International Software Quality-Week '96, San Francisco, CA, 1996.

Barr, V., "TRUBAC: A tool for testing expert systems with rule-base coverage measures", Proceedings of the 13th Annual Pacific Northwest Software Quality Conference, Portland, OR, 1995.

BOOK CHAPTERS

Barr, V., "Disciplinary Thinking, Computational Doing: Collaborating for Mutual Enrichment", New Directions for Computing Education: Embedding Computing Across Disciplines", Springer, April 2017.

Barr, V., "Computational Thinking", Computing Handbook, 3rd Edition , edited by Teofilo Gonzalez and Allen Tucker, Chapman & Hall/CRC Press, April 2014

ARTICLES / WORKSHOPS

Barr, V. "What Must All Post-secondary Students Learn About Computing?", Communications of the ACM, Volume 65, Issue 11, November 2022, pp 29–31, https://doi.org/10.1145/3563968

Horton, N. J., Baumer, B. S., Zieffler, A., & Barr, V. (n.d.). The Data Science Corps Wrangle-Analyze-Visualize Program: Building Data Acumen for Undergraduate Students. *Harvard Data Science Review*. Retrieved from https://hdsr.mitpress.mit.edu/pub/nvflcexe/release/1

Stephenson, C. and Derbenwick Miller, A. and Alvarado, C. and Barker, L. and Barr, V. and Camp, T. and Frieze, C. and Lewis, C. and Cannon Mindell, E. and Limbird, L. and Richardson, D. and Sahami, M. and Villa, E. and Walker, H. and Zweben, S., "Retention in Computer Science Undergraduate Programs in the U.S.: Data Challenges and Promising Interventions", ACM Tech Report, 2018.

Barr, V., "Computing Education Will Not Be One Size Fits All", ACM Inroads, December 2018.

Barr, V., "Different Denominators, Different Results: Reanalyzing CS Degrees by Gender, Race, and Ethnicity", ACM Inroads, September, 2018.

Dubow, W., Quinn, B., Townsend, G., Robinson, R., Barr, V., "Efforts to Make Computer Science More Inclusive of Women", ACM Inroads, December 2016.

Barr, V., "Disciplinary Thinking, Computational Doing: Promoting Interdisciplinary Computing While Transforming Computer Science Enrollments", ACM Inroads, June 2016.

Barr, V. and Trytten, D. "Using Turingscraft CodeLab to Support CS1 Students as They Learn to Program", ACM Inroads, June 2016.

Barr, V., "Much ado about salary: Grace Hopper and Satya Nadella", ACM SIGCAS Computers and Society, Volume 44, Issue 4, December 2014.

Barr, V., Burkett, A., and Webb, N., "Introducing Blake Browser: William Blake and Computational Analysis", CUR Quarterly, Winter, 2013.
Barr, V. and Stephenson, C., "Bringing Computational Thinking to K-12: What is Involved and What is the Role of the Computer Science Education Community?", ACM Inroads, 2011.

Barr, V., "Campus-Wide Computation Initiative: A New Model for Computing Education", Purdue University SECANT Workshop, 2008.

Striegnitz, K., and Barr, V., "Can Computers Think? - an introduction to computer science, programming, and artificial intelligence", AAAI Spring Symposium, 2008.

Barr, V. and Siefring, E., "Verification of LTAGs for Language Generation", TAG+7 International Workshop on Tree Adjoining Grammars, Vancouver, 2004.

Barr, V. and Klavans, J., "Verification and Validation of Language Processing Systems: Is It Evaluation?", ACL 2001 Workshop on Evaluation Methodologies for Language and Dialogue Systems, Toulouse, 2001.

Barr, V. and Mehrotra, M., "Application of clustering analysis to coverage testing for large KBS", AAAI-98 Workshop on Verification and Validation of Expert Systems, Madison, WI, 1998.

Barr, V., "Quantitative performance prediction for rule-based expert systems", AAAI-98 Workshop on Verification and Validation of Expert Systems, Madison, WI, 1998.

Barr, V., "Rule-base coverage measures applied to testing rule-bases with uncertainty", IJCAI-95 Workshop on Verification and Validation of Expert Systems, Montreal, 1995.

Barr, V., "Rule-based systems testing using rule-based coverage measures", IEEE Conference on AI Applications Workshop on Verification and Validation of Expert Systems, 1995.

Barr, V., "Incorporating uncertainty in a DAG-based approach to static and dynamic verification of rule-based systems: Extended Abstract", AAAI-93 Workshop on Verification and Validation of Expert Systems, Washington, DC, 1993.

Barr, V., "A DAG-based approach to static and dynamic verification of rule-based systems", AAAI-92 Workshop on Verification and Validation of Expert Systems, San Jose, CA, 1992.

Barr, V., "Exploring expert systems", IEEE Computer, November 1988, pp. 68-73.

KEYNOTES / INVITED PRESENTATIONS (partial list)
- *Invited* Speaker, Northeastern University, "The Importance of Intersectionality in Data and Cohort Context", Center for Inclusive Computing, with Carla Brodley and Manuel Pérez-Quiñones, October 2022.
- Invited *Speaker,* Colgate University, "The proof is in the data: what you think you know about diversity in STEM is wrong!", Natural Sciences Colloquium, September, 2022.
- *Invited Speaker,* Iona College, "What is it really and how do we do it? Exploring Data Science, Data Analytics, Data Feminism", September, 2020.
- *Invited Speaker*, Metropolitan University, Oslo, Norway, "The Importance of the Denominator", July, 2019.
- *Invited Speaker,* CERN, Geneva, Switzerland, "Data and Diversity", July, 2017.
- *Invited Keynote Speaker,* University of Delaware Summer Faculty Institute, "Data Data Everywhere: Fun With Data For All Disciplines", June, 2017.

- *Invited Speaker,* CRA-W Career Mentoring Workshop, "Academic Negotiation", November, 2016.
- *Invited Speaker,* CRA-W Track at 2016 Grace Hopper Conference, "Effective Teaching and Class Management", October, 2016.
- *Invited Speaker,* BuzzFeed Women in Development Group, March, 2016.
- *Invited Speaker,* Hofstra University, "The Toy Aisle Still Matters" The State of Women in STEM", October, 2015.
- *Invited Speaker,* STEM Ed Institute, University of Massachusetts at Amherst, "Disciplinary Thinking, Computational Doing: Promoting Interdisciplinary Computing While Transforming Computer Science Enrollments", October, 2015.
- *Invited Speaker*, Microsoft Research, "One Data Set, Two Stories", July, 2015.
- *Invited Speaker,* Women's Institute for Summer Enrichment, UC Berkeley TRUST Center (Team for Research in Ubiquitous Secure Technology), June, 2015.
- *Invited Speaker,* Brown University, Inaugural presentation in the Diversity in Computing Speaker Series, "The Toy Aisle Still Matters: The State of Women in Computing", November 2014.
- *Invited Speaker,* Whitman College, "Blake, Biofuel, and Bribery: Promoting Interdisciplinary Applications of Computing", September 2014.
- *Keynote Address,* Faculty Academy, Washington & Lee University, "Bridging the Faculty Digital Divide", December 2013.
- *Invited Speaker,* United States State Department for the Fifth U.S.-China Women's Leadership and Exchange Dialogue, November, 2013.
- *Invited Speaker,* Lafayette College, "Life at the Intersection: Interdisciplinarity and 21st Century Computer Science", November 2013.
- *Keynote Address,* Digital Thinking/Critical Thinking conference, Hofstra University, "Blake, Biofuel, and Bribery: Promoting Interdisciplinary Applications of Computing", October 2013.
- *Keynote Address,* NCWIT Aspirations Awards Ceremony, NW Region, "Computer Science at *Your* Age!??!? What's Next?", April 2013.
- *Keynote Address,* 51st ACM Southeast Conference "We Love Computer Science So Much: Why Don't More Students Share The Love?", 2013.
- *Invited Speaker,* Denison College, "A Tale of Connections, Collaboration, and Bribery: Bringing People to Computing", 2012.
- *Keynote Address,* K-12 Computing Teachers Workshop, Grace Hopper Celebration, 2010.
- *Invited Speaker,* NSF Broader Impacts for Research and Discovery Summit, 2010.
- *Invited Speaker,* Sarah Lawrence College, 2010.
- *Invited Speaker,* University at Albany, 2009.
- *Invited Speaker,* Hofstra University, 2009.
- *Invited Speaker,* Brooklyn College, 2009.
- *Presenter,* NSF SIGCSE showcase, 2009
- *Invited Speaker*, City University of New York Computer Science Discipline Council Meeting, 2008.

PANELS / INVITED PARTICIPANT
- "Intersectionality: Measuring and Visualizing Diversity", Tapia 2022, with Carla Brodley and Manuel Pérez-Quiñones
- Panelist for SIGCSE 2022 co-located session on CS at Liberal Arts Colleges
- Organized and co-led Birds of the Feather session "Interdisciplinary computing majors (CS+X): Making it work at your university" at SICSE 2022
- "How universities are creating new pathways to diversify tech", 2021 NSF RESET Conference (Re-Enter STEM Through Emerging Technology), Syracuse University.

- "CS + X Meets CS 1: Strongly Themed Intro Courses", SIGCSE 2020, Portland, OR, March 2020 (canceled due to COVID-19)
- "How Universities are Creating New Pathways to Diversity Tech", GHC 2019, Orlando, FL, October 2019.
- "Holistic Approaches to Computer Science", SIGCSE 2017, Baltimore, MD, February 2018.
- "What Crisis?: Mobilizing the Humanities Through Data", National Humanities Conference, Boston, MA, November 2017.
- Google Summit on Retention in Undergraduate CS Education, Google Headquarters, Mountainview, CA, January, 2016.
- "Why is Ada Lovelace Still the Woman That Young (and Not So Young) Women Look To?", Ada Lovelace Symposium, Oxford University, December, 2015.
- "When working for diversity in CS becomes your day job", 2015 ACM Richard Tapia Celebration of Diversity in Computing, February, 2015.
- "Beyond Computer Science: Computational Thinking Across Disciplines", ITiCSE '13: Innovation and Technology in Computer Science Education Conference, 2013.
- "Rediscovering the Passion, Beauty, Joy, and Awe: Making Computing Fun Again, part 6", SIGCSE-2013.
- White House Office of Science and Technology Policy Tech Inclusion Roundtable, focus on youth from under-served and historically under-represented communities, Aug. 2012.
- "Starting a Computational Science Program", SIGCSE-2011.
- "Tips on negotiating throughout your career", Grace Hopper Conference, 2011.
- "Computational Thinking in High School Courses", SIGCSE-2010.
- "Building Bridges to Other Departments: Three Strategies", SIGCSE-2010.
- "For the Love of Teaching: Experiences of Undergraduate Liberal Arts College Faculty", Grace Hopper Conference, 2010.
- "Recruitment and Retention at Primarily Undergraduate Institutions", Grace Hopper Conference, 2009.
- "Best Practices for Introductory Computer Science", Grace Hopper Conference, 2009.
- "Building a campus wide computation initiative", Consortium for Computing Sciences in Colleges, 2008.
- "We Invent the Future of Interdisciplinary Research", Grace Hopper Conference, 2006.
- "Contemporary and Historical Representations of Women: How do they reflect and impact the culture of their times?", Teach-in on Media Literacy, Convent of the Sacred Heart School, 2000.
- "Emerging technologies in language engineering", Grace Hopper Conference, 2000.
- "Advantages and Limits of Using Formal Methods", Florida Artificial Intelligence Research Symposium, 2000.
- "Software testing in the CS curriculum", Consortium for Computing in Small Colleges Northeast Regional Conference, 2000.
- "Does information technology reduce discrimination?", Mount Holyoke College: The Information Technology Revolution: Women, Work, and Social Change, 2000.
- "CS1 program examples", Consortium for Computing in Small Colleges Northeast Regional Conference, 1998.

DIGITAL ACTIVITIES / BLOGGING / PUBLIC OUTREACH
- "Gender Diversity in Computing: are we making any progress?", April 2017, Communications of the ACM, editorial.
- "How We Teach Should Be Independent Of Who We Are Teaching", October 2016, Blog@CACM
- "A Very Local Snapshot of K-12 CS Education", June 2016, Blog@CACM

- "Why is Ada Lovelace Still the Woman that Young (and Not So Young) Women Look To?", December, 2015, Blog@CACM.
- "Thoughts on 'The Frenzy About High Tech Talent' and a Call for Corporate Action", October, 2015, Blog@CACM.
- "If Something Seems Odd, Check the Data, and Check It Again!", August, 2015, Blog@CACM.
- "Things that Men Can Do To Be Real Allies For Women In Computing", August, 2015, Blog@CACM.
- "Some Thoughts For Computer Science Teaching Assistants (And Faculty)", January, 2015, Blog@CACM.
- "Women in STEM, Women in Computer Science: We're Looking At It Incorrectly", December, 2014, Blog@CACM
- "The Toy Aisle Matters More Than Ever: Girls and Computing", November, 2014, Blog@CACM
- CSTA blog post "STEM and Humanities: It Isn't Either-Or" reposted by *4Humanities: Advocating for the Humanities*.
- Periodic blogger for BLOG@CACM, blog site of Communications of the Association for Computing Machinery and additional posts available directly at https://vbarr4.github.io/blogs.html

PROFESSIONAL AND CAMPUS SERVICE (partial list)

Leadership Positions / Advisory Boards
- *External Advisory Committee,* Templeton Institute for Engineering and Computer Science, Union College, 2022-present.
- *Steering Committee*, "RCN: Developing a Multi-Institution Research-Practitioner Network to Enhance the Success of Diverse Students in Computer Science and Engineering From High School to the Workforce", UMASS Amherst, funded by NSF, 2019-2022.
- *Member,* Research Group of the UN ITU EQUALS project on equal access to the digital revolution for women and girls, 2017 - 2021.
- *Past Chair*, Association for Computing Machinery Council on Women in Computing (ACM-W), 2017 – present. *Chair,* ACM-W, 2012 – 2017. *Member*, Association for Computing Machinery Education Council, 2014 – 2017. *Member,* Association for Computing Machinery Education Board, 2016 - 2019.
- Board of Directors, Computer Science Teachers Association, 2010 – 2013.
- *Sponsorship Chair and Budget Chair,* New York Regional Celebration of Women in Computing, 2010-2011, 2012-2013, 2014-2015.
- *Ph.D. Forum Co-chair*, Grace Hopper Celebration of Women in Computing, 2011.
- *Steering Committee*, "Leveraging Thought Leadership for Computational Thinking in the PK-12 Curriculum", a project of CSTA and ISTE, funded by NSF, 2009-2011.
- *Organizing Committee*, NSF CPATH PI Meeting, 2009
- *Workshops Co-chair,* Tapia Celebration of Diversity in Computing, 2009
- *Chair,* ACM-W Scholarship Committee, 2006-2012
- *Co-chair,* Anita Borg Institute & IBM TechLeaders Workshop, 2006
- *Program co-chair,* Florida Artificial Intelligence Research Symposium, 2004
- *Chair,* Advisory Board, Anita Borg Institute for Women and Technology, 2001-2006.
- *Special Tracks Coordinator,* Florida Artificial Intelligence Research Symposium, 1999
- *Program Chair,* Hofstra University Women and Computing Symposium, 1998

Program Committee Memberships
- *Panels and Workshops Committee,* Grace Hopper Celebration of Women in Computing, 2010
- *Academic Advisory Committee*, Grace Hopper Celebration of Women in Computing, 2009
- Fund Raising Committee, Grace Hopper Celebration of Women in Computing, 2006
- Florida Artificial Intelligence Research Symposium: 2004 - 2009

External Review Committees
- Department of Computer Science, American University of Paris, October, 2022.
- Department of Computer Science, Smith College, 2022.
- School of Computing, DePaul University College of Computing and Digital Media, 2020.
- Department of Computer Science, Pomona College, 2016.
- Department of Computer Science, Knox College, 2014.
- Department of Computer Science, Hanover College, 2014.
- Department of Computer Science, Bowdoin College, 2013
- Liberal Studies Program, DePaul University, 2011
- Department of Computer Science, Swarthmore College, 2009
- Information Technology Leadership Program, Washington and Jefferson College, 2007

Mount Holyoke College
- 2017-2022   Co-Lead, Data Science Program
- 2017-2022   Faculty Advisory Board for McCulloch Center on Global Initiatives
- 2017-2022   One tenure committee, two full professor promotion committees, three faculty search committees (three tenure track faculty and two visitors hired)

Union College
- 2014-2017   Secretary of the Faculty, member of Faculty Executive Ctte. and Planning and Priorities Ctte.
- 2004-2016   Eight faculty search committees, four tenure committees
- 2004-2012   Science and Engineering Building/Space Committee
- 2004-2011   Women's and Gender Studies Steering Committee
- 2004-2011   Electrical and Computer Engineering Advisory Committee
- 2005-2006   General Education Board
- 2005-2009   Academic Computing Steering Committee
- 2005-2006   Co-convener of department chairs
- 2005-2011   Union College coordinator for MentorNet
- 2006-2011   Neuroscience Program Committee
- 2007-2008   Web Policy Board
- 2007-2008   Search Committee for Director of Foundation and Corporate Relations
- 2007-2008   Director of Computer Engineering
- 2008-2009   Documentation Committee for Middle States Accreditation
- 2009-2017   Faculty advisor for computational methods minor
- 2010-2012   Faculty Appeals Committee
- 2010-2011   Director of Computer Engineering

Society Memberships
- American Association for the Advancement of Science (AAAS)
- Association for Computing Machinery (ACM), Senior Member
- Association for the Advancement of Artificial Intelligence (AAAI)

- Computer Science Teachers Association
- IEEE Computer Society and IEEE
- Liberal Arts Computer Science Consortium
- New York Academy of Sciences
- National Organization of Gay and Lesbian Scientists and Technical Professionals