

BRIEF CURRICULUM VITAE

Leah H. Jamieson

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Education

B.S.	Mathematics	1972	M.I.T.
M.A.	Electrical Engineering and Computer Science	1974	Princeton University
M.S.E	Electrical Engineering and Computer Science	1974	Princeton University
Ph.D.	Electrical Engineering and Computer Science	1977	Princeton University

Professional Experience

1976–1982	Assistant Professor, School of Electrical Engineering, Purdue University
1982–1986	Associate Professor, School of Electrical Engineering, Purdue
1985, Summer 1986	Visiting Scientist, Computer Science Laboratory, SRI International
1986–2002	Professor, School of Electrical Engineering / School of Electrical and Computer Engineering, Purdue
1990–1994	Graduate Coordinator, School of Electrical Engineering, Purdue
1994–1996	Director of Graduate Admissions, School of Electrical Engineering / School of Electrical and Computer Engineering, Purdue
1996– 2002	Co-Director, Engineering Projects in Community Service (EPICS), Schools of Engineering, Purdue
1999–2006	Co-Director of the National EPICS Program
2002–2006	Ransburg Professor of Electrical and Computer Engineering, Purdue
2002	Interim Head, School of Electrical and Computer Engineering, Purdue
2003–2006	Director, Engineering Projects in Community Service (EPICS), Purdue
2004–2006	Associate Dean for Undergraduate Education, College of Engineering, Purdue
2004–Present	Professor of Engineering Education (by courtesy), Purdue
2006	Interim Dean, College of Engineering, Purdue
2006–2017	John A. Edwardson Dean, College of Engineering, Purdue
2006–Present	Ransburg Distinguished Professor of Electrical and Computer Engineering, Purdue
2017–Present	John A. Edwardson Dean Emerita, College of Engineering, Purdue

Selected Awards and Honors

IEEE James H. Mulligan, Jr. Education Medal “for contributions to the promotion, innovation, and inclusivity of engineering education,” 2020.

Honorary Doctorate, New Jersey Institute of Technology, 2018.

Named President Emerita of the IEEE Foundation, 2018.

Inducted into the Purdue Innovators Hall of Fame, 2017.

Directorship of the Purdue Women in Engineering Program named the Leah H. Jamieson Director in Dean Jamieson’s honor, 2017.

Purdue College of Engineering Staff Award for Excellence in Leadership named the Leah H. Jamieson Leadership Award in Dean Jamieson’s honor, 2016.

National Association of Multicultural Engineering Program Advocates (NAMEPA) Dean of Engineering Champion Award, 2016.

Kate Gleason Medal for Leadership in Engineering Education from the Rochester Institute of Technology, 2015, inaugural recipient.

Honorary Doctorate, Drexel University, 2014.

Woman of Wisdom Award, Greater Lafayette YWCA Salute to Women, Lafayette, IN, 2014.

Presented the Key to the City of Medellin, Colombia, 2014.

Simon Bolivar Medal from the National Ministry of Education of Colombia, 2013.

Title IX Distinguished Service Award from the Office of Ethics and Compliance, Purdue University, in honor of the 40th Anniversary of Title IX, 2014.

IEEE Richard M. Emberson Award for contributions to IEEE’s Technical Activities, 2013.

Honorary Member of Tau Beta Pi, 2011.

Elected Member of the American Academy of Arts & Sciences, 2011.

Eminent Member of IEEE-Eta Kappa Nu (the Electrical and Computer Engineering Honor Society), 2011.

Elected Fellow of the American Society for Engineering Education (ASEE), 2011.

Honorary Member of the Barbara Cook Chapter of Mortar Board, 2011.

EE Times ACE Award, Educator of the Year, 2009.

Anita Borg Institute Women of Vision for Social Impact Award, 2007.

Elected Fellow of the International Engineering Consortium (IEC), 2007.

One of 15 women in the inaugural class of Women Pioneers of Purdue University, Purdue University Council on the Status of Women, 2006.

Electrical and Computer Engineering Department Heads’ Association (ECEDHA) Innovative Program Award, 2006, with Edward J. Coyle.

U.S. National Academy of Engineering Bernard M. Gordon Prize for Innovation in Engineering and Technology Education “for innovations in the education of tomorrow’s engineering leaders by developing and disseminating the Engineering Projects in Community Service (EPICS) program,” with Edward J. Coyle and William C. Oakes, 2005.

Elected to the United States National Academy of Engineering (NAE) “for innovations in integrating engineering education and community service,” 2005.

Shared in the National Science Board’s 2005 Public Service Award presented to the Computing Research Association’s Committee on the Status of Women in Computing Research. Jamieson is a past co-chair of the CRA committee.

Shared in a 2004 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM) presented to the Computing Research Association’s Committee on the Status of Women in Computing Research “for significant achievements in mentoring women across educational levels.”

IEEE Signal Processing Society Meritorious Service Award, 2003.

Inducted into Purdue’s Book of Great Teachers, 2003.

House Resolution “to honor Professor Leah Jamieson for being named 2002 Indiana Professor of the Year” adopted by the Indiana General Assembly, March 27, 2003.

First Annual Team Excellence Award in the Schools of Engineering, Purdue University, presented to the EPICS Team (Leah H. Jamieson, Edward J. Coyle, William C. Oakes, and Pamela R. Brown), 2003.

First Annual Governor’s Award for Outstanding Volunteerism, presented by the Governor of Indiana to the EPICS Program, 2003.

Indiana Professor of the Year, Carnegie Foundation and the Council for Advancement and Support of Education, 2002.

National Science Foundation Director’s Award for Distinguished Teaching Scholars, 2001; member of the inaugural class of seven Distinguished Teaching Scholars.

Harriet B. Rigas “Outstanding Woman Engineering Educator” Award, IEEE Education Society, 2000.

Violet Haas Award, Council on the Status of Women at Purdue University, 2000.

IEEE Third Millennium Medal, 2000.

One of 15 charter members of the American Association for Higher Education-Campus Compact Service Learning Consulting Corps, 2000.

Helen B. Schleman Gold Medallion “for outstanding contribution and concern for women students, encouragement of women in academic and professional areas, leadership and service within and outside the University, and scholarship and character,” Purdue University, 1999.

1997 Ruth and Joel Spira Outstanding Teacher Award, School of Electrical and Computer Engineering, Purdue University, 1997, with Edward J. Coyle.

Class of 1922 Annual Award for Outstanding Innovation in “Helping Students Learn,” Purdue University, 1997, with Edward J. Coyle.

1997 Chester F. Carlson Award for Innovation in Engineering Education from the American Society for Engineering Education (ASEE), with Edward J. Coyle.

One of 18 women profiled in the Careers Booklet *Women in Computer Science* published in 1996 by the Computing Research Association’s Committee on the Status of Women in Computing Research.

Fellow of the IEEE “for contributions to the design and characterization of parallel algorithms for speech, image, and signal processing applications,” 1993.

IEEE Computer Society Distinguished Visitor, 1990-1994.

IEEE Acoustics, Speech, and Signal Processing Society Distinguished Lecturer, 1990-1991.

National Report Committees

Member (2006-2008), Steering Committee for the NAE Consensus Report *Changing the Conversation: Messages to Improve the Public Understanding of Engineering*. NRC Press, 2008.

Co-Chair (2007-2012), ASEE NSF-funded project, *Innovation with Impact: Creating a Culture for Scholarly and Systematic Innovation in Engineering Education*. Phase I report, ASEE, June 2009; Phase II report, ASEE, 2012, with Jack Lohmann. <https://www.asee.org/member-resources/reports/Innovation-with-Impact>.

Member (2010-2013), Planning Committee for the American Association for the Arts and Sciences (AAAS) study *Sustainable Funding Models for the American Research University: ARISE II –Advancing Research in Science and Engineering*. AAAS, 2013.

Member (2013-2016), Steering Committee for the NAS/NAE Consensus Report *Barriers and Opportunities for 2-Year and 4-Year STEM Degrees: Systemic Change to Support Students' Diverse Pathways*. NRC Press, 2016.

Chair (2016-2019), Steering Committee for the NSF-funded NAE [Workshop Series and Proceedings](#): *The Engagement of Engineering Societies in Undergraduate Engineering Education* (2017); *An Undergraduate Competition Based on the Grand Challenges for Engineering: Planning and Initial Steps* (2018); *Understanding Measures of Faculty Impact and the Role of Engineering Societies* (2018); *Engineering Societies' Activities in Promoting Diversity and Inclusion* (2018); *Engineering Societies' Activities in Helping Align Industry and Academia* (2018).

Member (2019-2020), Steering Committee for the NASEM Consensus Report *Cultivating Interest and Competencies in Computing: Authentic Experiences and Design Factors*. NRC Press, 2021.

Member (2020-2021), Study Committee for NASEM Fast-Track Consensus Report *The Impact of COVID-19 on the Careers of Women in Academic Sciences, Engineering, and Medicine*, pre-publication report released March 2021.

Selected Keynote Talks

"Forces Driving Information Technology Research into the 21st Century," *11th International Conference on Parallel and Distributed Computing Systems (PDCS-98)*, Chicago, Illinois, September 1998.

"Engineering, Community, Passion, and Balance," *2002 Grace Hopper Celebration of Women in Computing*, Vancouver, British Columbia, October 2002.

"The Case for Engineering Service Learning," *2006 Conference on Service Learning in Engineering*, sponsored by the NSF and hosted by the NAE, Washington, DC, May 2006.

"Experiencing Engineering" *2007 American Society for Engineering Education (ASEE) Annual Conference*, Honolulu, Hawaii, June 2007.

"Changing the Face of Engineering: Emerging Opportunities," *Women in Engineering Pro-Active Network (WEPAN) Annual Conference*, Orlando, Florida, June 2007.

"Who Will Become an Engineer?" *Frontiers in Education 2007*, Milwaukee, Wisconsin, October 2007; *International Symposium on Women Engineers and Future Society*, Seoul, Korea, November 2007; *IEEE-VDE International Conference on Meeting the Growing Demand for Engineers and their Educators, 2010-2020*, Munich, Germany, November 2007; *2008 Women in Science, Technology and Engineering Workshop*, sponsored by the IEEE and the China Association for Science and Technology, Beijing, China, October 2008.

"A Path to Leadership," *Senior TechLeaders: Leadership, the Final Frontier*, Atlanta, Georgia, June, 2008.

"Creating a Culture for Scholarly and Systematic Innovation in Engineering Education," *Engineering Deans Institute*, Boston, Massachusetts, March, 2009, with J. Lohmann.

"Engineering Education Innovation: Imagine a class where ..." *2009 ASEE Annual Conference*, Austin, Texas, June 2009, with J. Lohmann.

“Reflections on Academia,” *7th NSF/ADVANCE Forward to Professorship Conference*, Washington, DC, May 2011.

“Advancing Women in STEM: Making Progress but Still a Long Way to Go,” P.E.O. Sisterhood, West Lafayette, IN, April 2017, Founders Day keynote presentation.

“50 Years: What Has Changed, What Remains the Same?” Purdue’s Women in Engineering Program 50th Anniversary Celebration, Purdue University, West Lafayette, IN, March 2019, keynote address.

Representative Publications and Presentations

Author or co-author of over 200 publications. The following are representative.

Edited Books:

Algorithmically Specialized Parallel Computers, L. Snyder, L.H. Jamieson, D.B. Gannon, and H.J. Siegel, editors, Academic Press, New York, NY, 1985.

The Characteristics of Parallel Algorithms, L.H. Jamieson, D.B. Gannon, and R.J. Douglass, editors, MIT Press, Cambridge, MA, 1987.

Publications and Presentations in Speech Processing, Parallel Processing, and Computing:

L.H. Jamieson, “Characterizing Parallel Algorithms,” in *The Characteristics of Parallel Algorithms*, L. H. Jamieson, D. Gannon, and R. J. Douglass, editors, MIT Press, Cambridge, MA, 1987.

T.A. Rice and L.H. Jamieson, “A Parallel Algorithm for Finding the Roots of a Polynomial,” *IEEE Trans. Computers*, Vol. C-38, Mar. 1989.

M.A. Yoder and L.H. Jamieson, “Simulation of a Word Recognition System on Two Parallel Architectures,” *IEEE Trans. Computers*, Vol. C-38, No. 9, Sept. 1989.

E.C. Bronson, T.L. Casavant, and L.H. Jamieson, “Experimental Application-Driven Architecture Analysis of an SIMD/MIMD Parallel Processing System,” *IEEE Trans. Parallel and Distributed Systems*, Vol. 1, No. 2, Apr. 1990.

J. Li and L.H. Jamieson, “A System for Algorithm-Architecture Mapping Based on Dependence Graph Matching and Hypergraphs,” *Fifth Int’l Parallel Processing Symp.*, Apr. 1991.

F.J. Weil, L.H. Jamieson, and E.J. Delp, “DISC: A Method for Dynamic Intelligent Scheduling and Control of Reconfigurable Parallel Architectures,” *J. Parallel and Distributed Computing*, Vol. 13, No. 3, Nov. 1991.

L.H. Jamieson, E.J. Delp, C.-C. Wang, J. Li, and F.J. Weil, “A Software Environment for Parallel Computer Vision,” *IEEE Computer*, Vol. 25, No. 2, Feb. 1992.

M.P. Harper, L.H. Jamieson, C.D. Mitchell, G. Ying, S. Potisuk, P.N. Srinivasan, R. Chen, C.B. Zoltowski, L.L. McPheters, B. Pellom, and R.A. Helzerman, “Integrating Language Models with Speech Recognition,” *AAAI-94 Workshop on the Integration of Natural Language and Speech Processing*, Aug. 1994.

C.D. Mitchell, M.P. Harper, L.H. Jamieson, and R.A. Helzerman, “A Parallel Implementation of a Hidden Markov Model with Duration Modeling for Speech Recognition,” *Digital Signal Processing*, Vol. 5, No. 1, Jan. 1995.

C.D. Mitchell, M.P. Harper, and L.H. Jamieson, “On the Complexity of Explicit Duration HMMs,” *IEEE Trans. Speech and Audio Processing*, Vol. 3, No. 3, May 1995.

J.N. Patel, A.A. Khokhar, and L.H. Jamieson, “Scalable Parallel Implementations of List Ranking on Fine-grained Machines,” *IEEE Trans. Parallel and Distributed Systems*, Vol. 8, No. 10, Oct. 1997.

P. Srinivasan and L.H. Jamieson, “High Quality Audio Compression Using an Adaptive Wavelet Packet Decomposition and Psychoacoustic Modelling,” *IEEE Trans. Signal Processing*, Vol. 46, No. 4, Apr. 1998.

M.T. Johnson, L.H. Jamieson, and M.P. Harper, "Interfacing Acoustic Models with Natural Language Processing Systems," *5th Int'l Conf. Spoken Language Processing*, Dec. 1998.

J.N. Patel, A.A. Khokhar, and L.H. Jamieson, "Scalability of 2-D Wavelet Transform Algorithms: Analytical and Experimental Results on MPPs," *IEEE Trans. Signal Processing*, Vol. 48, No. 12, Dec. 2000.

R. Kennell and L.H. Jamieson, "Establishing the Genuinity of Remote Computer Systems," *USENIX '03 Proceedings*, June 2003. *Winner of Best Student Paper Award.*

L.H. Jamieson, "An Example of Research and Technology Roadmap: Research Directions in Speech Recognition," IEEE meeting with the European Commission, Brussels, Belgium, April 2004 (invited presentation).

Publications and Presentations in Education:

E.J. Coyle, H.G. Dietz, and L.H. Jamieson, "Long-Term Community Service Projects in the Purdue Engineering Curriculum," *1996 ASEE Annual Conf.*, June 1996.

E.J. Coyle, L.H. Jamieson, and L.S. Sommers, "EPICS: A Model for Integrating Service-Learning into the Engineering Curriculum," *Michigan J. Community Service Learning*, Vol. 4, Fall 1997.

L.H. Jamieson, E.J. Coyle, M.P. Harper, E.J. Delp, and P. Davies, "Integrating Engineering Design, Signal Processing, and Community Service in the EPICS Program," *1998 IEEE Int'l Conf. Acoustics, Speech, and Signal Processing*, May 1998.

W.C. Oakes, E.J. Coyle, and L.H. Jamieson, "EPICS: A Model of Service Learning in an Engineering Curriculum," *2000 ASEE Annual Conf.*, June 2000.

E.J. Coyle, R. Foretek, J.L. Gray, L.H. Jamieson, W.C. Oakes, J. Watia, and R. Wukasch, "EPICS: Experiencing Engineering Design Through Community Service Projects," *2000 ASEE Annual Conf.*, June 2000.

W.C. Oakes, L.H. Jamieson, and E.J. Coyle, "Documenting Service Learning to Meet ABET Engineering Criteria 2000," *2001 Frontiers in Education (FIE) Conference*, Oct. 2001.

L.H. Jamieson, W.C. Oakes, and E.J. Coyle, "EPICS: Serving the Community Through Engineering Design Projects," *Learning to Serve: Promoting Civil Society Through Service Learning*, M. Kenny, L.A.K. Simon, K. Kiley-Brabeck, and R.M. Lerner, editors, Kluwer Academic Publishers, 2002.

L.P.B. Katehi, K. Banks, H.A. Diefes-Dux, D.K. Follman, J. Gaunt, K. Haghighi, P.K. Imbrie, L.H. Jamieson, R.E. Montgomery, W.C. Oakes, and P. Wankat, "A New Framework for Academic Reform in Engineering Education," *2004 ASEE Annual Conf.*, June 2004.

J. Heinzen, L. Jamieson, J. Krueger, S. Nation, W. Oakes, and C. Zoltowski, "University and Community Partnerships for Reaching Pre-College Students: The EPICS Model," *ASEE Annual Conf.*, June 2005.

C.B. Zoltowski, W.C. Oakes, and L.H. Jamieson, "Equipping Multi-Disciplinary Student Teams to Manage Multi-Semester Design Projects," *2005 ASEE Annual Conf.*, June 2005.

F.R. DeRego Jr., C.B. Zoltowski, L.H. Jamieson, and W.C. Oakes, "Teaching Ethics and the Social Impact of Engineering Within a Capstone Course," *2005 Frontiers in Education (FIE) Conf.*, Nov. 2005.

E.J. Coyle, L.H. Jamieson, and W.C. Oakes, "2005 Bernard M. Gordon Prize Lecture: Integrating Engineering Education and Community Service: Themes for the Future of Engineering Education," *J. Engineering Education*, Vol. 95, No. 1, Jan. 2006.

K. Bowman, K. Banks, D. Harris, M. Harris, L.H. Jamieson, K. Kokini, C. Percifield, and T. Reed-Rhoads, "Purdue's Future Engineer: Developing Engineering Curricula for the 21st Century," *Engineering Education Leadership Institute*, sponsored by Intel, Hewlett-Packard, and the NAE Center for Advancement of Scholarship in Engineering Education (CASEE), Bloomington, IL, July 2006 (invited presentation).

R. Adams, N. Fortenberry, K. Haghighi, P. K. Imbrie, L. Jamieson, J. Lohmann, T. Reed-Rhoads, and K. Smith, "The National Engineering Education Research Colloquies," *J. Engineering Education*, Vol. 95, No. 4, Oct. 2006.

L.H. Jamieson, "Engineering Education in the Changing World," *HKN Bridge of Eta Kappa Nu*, Spring 2007 (invited paper).

L.H. Jamieson, "Rethinking the Engineer: A Redesign for Innovation," *Fortune Brainstorm Tech*, Half Moon Bay, CA, July 2008 (invited presentation).

J.D. Jones, P. Meckl, M. Cox, M. Harris, O. Cekic, M. Okos, O. Campanella, N. Houze, J. Litster, N. Mosier, D. Radcliffe, B. Tao, D. Delaurentis, S. Brophy, K. Howell, M. Okutsu, A. Penner, A. Wilson, L. Jamieson, "Purdue's Engineer of 2020: The Journey," *2009 ASEE Annual Conference*, June 2009.

M. Cardella, R. Davis, L. Nies, C. Percifield, S. Revankar, and L.H. Jamieson, "A Multi-Faceted Strategic Planning Process for Innovation," *2010 ASEE Annual Conf.*, June 2010.

L.H. Jamieson, "Inspiring Generations," *Wings in Orbit: Scientific and Engineering Legacies of the Space Shuttle*, N.W. Hale, H. Lane, K. Lulla, and G. Chapline, eds, NASA, Sept. 2010 (invited paper).

L.H. Jamieson, "Engineering Education Yesterday, Today, and Tomorrow" *Proceedings of the IEEE Centennial Issue*, Prolog to the Section on Engineering Education, May 2012 (invited paper).

L.H. Jamieson and J.R. Lohmann, *Innovation with Impact: Creating a Culture for Scholarly and Systematic Innovation in Engineering Education*, Phase I Report published by ASEE in June 2009; Final Report published by ASEE in 2012.

L.H. Jamieson "Driving Institutional Change: Some Frameworks, Experiences, and Reflections," *5th European Convention of Engineering Deans: Engineering for a Sustainable Europe*, Aalborg, Denmark, April 2013 (invited presentation).

L.H. Jamieson, "Engineering Education for the Americas: Shared Goals, Opportunities, Questions," *UPADI (Unión Panamericana de Asociaciones de Ingenieros) Workshop on Engineering for the Americas: Quality, Growth and Partnerships*, Medellin, Colombia, August 2013 (invited presentation).

L.H. Jamieson, "The Renaissance Engineer: A Challenge for Engineering Education," *American Society for Engineering Education (ASEE) Annual Conference*, Seattle, WA, June 2015 (invited presentation).

B.K. Jesiek and L.H. Jamieson, "The Expansive (Dis)Integration of Electrical Engineering Education," *IEEE ACCESS*, Vol. 5, Mar. 2017.

R.A. Adams, A. Godwin, L.H. Jamieson, W.C. Oakes, E. Pearson, and D. Riley, "Leaning into Change ... Leveraging Covid-19 as a Transformative Disruption," *2nd Colloquium on the Global State of the Art in Engineering Education*, virtual colloquium organized by University College London, December 2020 (invited presentation).

R. S. Adams, A. O. Brightman, J. DeBoer, L. H. Jamieson, W. C. Oakes, D. M. Riley, and P. Rudin, "Cultures of Engagement and Innovation: Realizing Purdue's Public Mission of Access and Impact in Engineering Education," *ASEE Advances in Engineering Education Special Issue on Innovative Engineering Education Programs Worldwide*, to appear.

J. Collofello, D. Fox, L. H. Jamieson, E. Lindsay, J. Loughman, J. Morgan, W. C. Oakes, H. Parker, J. Schoepf, C. Smith, "Dissemination of the EPICS Engineering Projects in Community Service Model," *ASEE Advances in Engineering Education Special Issue on Innovative Engineering Education Programs Worldwide*, to appear.

Publications and Presentations Related to Women in Engineering and Computing:

L.H. Jamieson and J.E. Cuny, "CRA-W: The Computing Research Association Committee on the Status of Women in Computing Research," *Grace Hopper Celebration of Women in Computing*, Sept. 1997.

E.M. Wadsworth, L.H. Jamieson, R. Sullivan Lee, and D.R. Mennen, *Classroom Climate Workshops on Gender Equity for Faculty Members*, video and guide, Anker Publishing, Bolton, MA, 1998.

L.H. Jamieson, "Cherchez la Femme," *IEEE Signal Processing Magazine*, Vol. 16, No. 4, July 1999.

L.H. Jamieson, "Do it for your daughters," *IEEE Signal Processing Magazine*, Vol. 16, No. 5, Sept. 1999.

L.H. Jamieson, "Engineering, Community, and Women," *Computing Research News*, Apr. 2001.

L.H. Jamieson, "Women in Engineering: Why it Matters," *The Institute*, IEEE, September 2007.

L.H. Jamieson, "Fireside Chat: A Conversation with Leah Jamieson," Fourth NSF Big Ten Women's Workshop, Milwaukee, WI, March 2019.

L.H. Jamieson and E.C. Jones, "The Impact of COVID-19 on the Careers of Women in Academic Sciences, Engineering, and Medicine: Some Reflections for Engineering Deans," video op-ed for the 2021 ASEE Engineering Deans Institute Annual Meeting and the ASEE Engineering Deans Council, April 2021.

Advisory Committees and Boards

National Research Council Committee, Advisory to the Army Research Office, 1984-1988.

NSF Division of Microelectronic Information Processing Systems Advisory Committee, 1987-1990.

NSF Directorate for Computer and Information Science and Engineering (CISE) Advisory Committee, 1997-2000.

Campus Compact Science, Mathematics, Engineering and Technology Service-Learning Advisory Committee, 1998-2006.

Northwestern University Electrical and Computer Engineering Advisory Committee, 1999-2005.

The Infinity Project Advisory Committee, 2002-04. Supported by grants from Texas Instruments and NSF, the Infinity Project developed a signal processing curriculum for high school students.

Indiana Campus Compact Advisory Committee, 2002-2006.

Princeton University Electrical Engineering Advisory Committee, 2001-2006.

Princeton University Keller Center for Innovation in Engineering Education Advisory Committee, 2007-Present.

National Academy of Engineering Center for the Advancement of Scholarship in Engineering Education (CASEE), 2006.

Clemson College of Engineering and Science Advisory Council, 2008-2012.

Anita Borg Institute Board of Trustees member (2009-2017) and Chair (2010-2014).

Science and Math Teacher Imperative (SMTI) of the Association of Public and Land-Grant Universities (APLU) Executive Committee, 2010-2016.

Epicenter: National Center for Engineering Pathways to Innovation Advisory Board, 2011-2016.

NAE committee "Infusing Real World Experience into Engineering Education," 2012.

Executive Committee for the Indiana Next Generation Competitiveness Manufacturing Center (IN-MaC), 2013-2017.

American Academy of Arts and Sciences Science, Engineering, and Technology Advisory Group, 2017-Present.

The Ohio State University Department of Engineering Education Advisory Board, 2017-2020.

NSF Directorate for Engineering Advisory Committee, member 2017-2020, co-chair 2020-21, chair 2021-Present.

Engineers Without Borders USA (EWB-USA) Board of Directors, 2018-2020.

Chilean Research Agency CONYCIIT Scientific and Technological Centers of Excellence: Advanced Center for Electrical and Electronic Engineering (AC3E) International Scientific Advisory Committee, Universidad Técnica Federico Santa María, Valparaiso, Chile, 2018-Present.

Imagination Station Board of Directors, Lafayette, Indiana, 2019-Present.

Cooper Union Nerkin School of Engineering Advisory Council, 2020-Present.

San Diego State University-University of California San Diego NSF ADVANCE: Multi-Campus Transformation Equity Network (MCTEN) Advisory Board, 2021-Present.

Representative Professional Activities

IEEE and the IEEE Foundation

President, IEEE Signal Processing Society, 1998-1999.

Member, IEEE Board of Directors and Executive Committee, 2003, 2005-2008.

IEEE Vice-President, Technical Activities, 2003.

Chair, IEEE Technical Activities Board New Technology Directions Committee, 2004-2006.

Member, IEEE Strategic Planning Committee, 2002, 2005-2006, 2010-2011; led IEEE's *Envisioned Future* strategic planning efforts, 2007-2008.

IEEE Vice-President, Publication Services and Products, 2005.

IEEE President and CEO, 2007.

Founding Chair, IEEE Committee on Public Visibility, 2007-2008.

Director of Strategic Planning, IEEE Educational Activities Board, 2010-2011.

IEEE Foundation President, 2012-2016; Board Member, 2010-2017.

National Academy of Engineering

NAE Special Fields & Interdisciplinary Engineering (Section 12), Member, Strategic Planning Committee, 2018-2019.

NAE Bernard M. Gordon Prize for Innovation in Engineering and Technology Education, Member, Selection Committee, 2018-2020.

American Academy of Arts & Sciences

Sciences, Engineering, and Technology Advisory Committee, Member, 2018-Present.

Editorial Boards

Associate Editor, *Journal of Parallel and Distributed Computing*, 1985-1992.

Associate Editor, *IEEE Transactions on Acoustics, Speech, and Signal Processing*, 1986-1987.

Editorial Board, *Journal of VLSI Signal Processing*, Kluwer Academic Publishers, 1987-1995.

Associate Editor, *IEEE Transactions on Parallel and Distributed Systems*, 1991-1994.

Editorial Board, *Proceedings of the IEEE*, 1999-2001.

Advisory Board, *Journal of Engineering Education*, 2008-2014.

Guest Editor for Engineering Education, Centennial issue of the *Proceedings of the IEEE*, 2012.

Editorial Advisory Board, *IEEE Spectrum*, 2017-Present.

Engineering and Computing

Co-Chair, *Workshop on Algorithmically-specialized Computer Organizations*, West Lafayette, IN, 1982, with D. Gannon, L. Snyder, and H.J. Siegel, sponsored by NSF and ONR.

Program Co-Chair, *1983 International Conference on Parallel Processing*, Columbus, OH, 1983.

Co-Chair, *Taxonomy of Parallel Algorithms Workshop*, Santa Fe, NM, 1983, with D. Gannon and R. Douglas (sponsored by U.S. Department of Energy).

Co-Chair (1996-1999), Computing Research Association (CRA) Committee on the Status of Women in Computing Research, Member, 1993-2005, Member Emerita, 2006-Present.

CRA Board of Directors, Member (1998-2007), Secretary (1999-2000).

Chair, *CRA Summit of Women in Computing Leaders*, Denver, CO, September 1999.

Co-Chair, *CRA Snowbird Conference*, July 2002.

Co-Chair, *2006 Conference on Service Learning in Engineering*, sponsored by NSF, hosted by NAE.

ASEE Engineering Deans' Council, Elected Member, 2010-2014.

Program Committee / Steering Committee member for numerous conferences and workshops.

Selected Activities Related to Women in Engineering and Computing

Activities at Purdue

Facilitator/moderator for pilot Classroom Climate Workshops on Gender Equity for faculty in the schools of engineering and science (1997): Workshops addressing gender equity issues, developed by the Women in Engineering and Women in Science programs and the Division of Theatre at Purdue, with support from the Sloan Foundation. Workshops were conducted at Purdue, the University of Illinois at Urbana-Champaign, and at the Rose-Hulman Institute of Technology. A follow-on project (1998) produced a video and facilitation guide for use by institutions wishing to conduct gender equity workshops for faculty.

Member, Presidential Task Force on Women's Issues (1995-1997).

Founding Chair, Purdue Women Faculty in Engineering Committee (1999).

Organizer and participant in K-12 workshops for girls and university seminars on women and leadership.

Co-Convener (2000-2001) of the Purdue Council on the Status of Women.

In recognition of Jamieson's leadership, the Directorship of Purdue's Women in Engineering Program was named in her honor upon completion of her term as Dean.

Computing Research Association (CRA and CRA-W)

The Computing Research Association (CRA) is an association of more than 150 North American academic departments of computer science and computer engineering, industrial and government laboratories engaging in basic computing research, and affiliated professional societies. CRA's Committee on the Status of Women in Computing Research (CRA-W) is a working committee whose mission is to take positive action that increases the number and success of women in computing research and higher education. Funded primarily by NSF, CRA-W has conducted projects aimed at research mentoring, information sharing, community building, and effecting organizational change.

Co-Chair of CRA's Committee on the Status of Women in Computing Research (CRA-W), 1996-1999.

Editor of the column "Expanding the Pipeline," published in the *Computing Research News*, 1993-1996.

Academic Careers for Women in Computing Workshop/ Research Careers for Women in Computing Workshop panelist, 1994-2003: Participated in several CRA mentoring workshops as a panelist on the topics of time management, building a research program, and advancing a research career.

Participated on a team that prepared CRA's testimony for the U.S. Congressional Commission on the Advancement of Women and Minorities in Science, Engineering, and Technology Development (the Morella Commission).

Organized the first CRA leadership summit of the chairs of the women's groups affiliated with professional organizations in computing (1999).

IEEE and the IEEE Foundation

Founder and organizer of the annual "Women in Signal Processing" lunch at the IEEE Signal Processing Society's International Conference on Acoustics, Speech, and Signal Processing (1993).

IEEE Signal Processing Magazine columns on women in engineering: "Cherchez la Femme" (Vol. 16, July 1999) and "Do it for your Daughters" (Vol. 16, September 1999).

Plenary speaker and panel organizer at the *IEEE Women in Engineering International Leadership Conference*, 2016-7.

Anita Borg Institute for Women and Technology

Member (2009-Present) and Chair (2010-2014) of the Board of Trustees of the Anita Borg Institute for Women and Technology.

Women and EPICS

EPICS goals are consistent with many recommendations that have been made for increasing the number of women and minorities in engineering: framing technical fields in their societal context, stressing broad educational goals, including communication, in engineering education; employing cooperative, interdisciplinary approaches. In the first eight years of operation, 25% of EPICS students were women. In Electrical and Computer Engineering and Mechanical Engineering, participation of women in EPICS was 20%, compared to approximately 11% in the ECE and ME undergraduate programs. In recent years, at least 50% of the students in the EPICS First-Year Engineering learning Committee have been women.

In 1999, Jamieson joined with four colleagues from Purdue to forge a partnership with the Anita Borg Institute for Women and Technology. This led to a series of workshops at Purdue that engaged over 200 women and girls from Purdue and the local community in discussions about technology. The EPICS team created products focused on technology for pre-teen and young-teen girls and designed a "female-friendly" collaborative computer lab for Purdue's Computer Science Department.