

VITAE
Douglas Edward Van Houweling
Professor
School of Information
3437 North Quad
105 South State Street
University of Michigan
+1 (734) 764-7322
dvh@umich.edu

Current Position and Responsibilities:

Professor, School of Information, University of Michigan. February 1995 to present.

Employment History:

Associate Dean for Research and Innovation, School of Information, University of Michigan, August 2010 to July 2014.

President and Chief Executive Officer, Internet2 (University Corporation for Advanced Internet Development). Responsible for directing the not-for-profit corporation that leads higher education's continuing role in Internet development. November 1997 to August 2010.

Dean for Academic Outreach and Vice Provost for Information and Technology, University of Michigan, February 1995 to November 1997.

Vice Provost for Information Technology, University of Michigan, December 1984 to February 1995.

Adjunct Professor, Business Administration and Political Science, University of Michigan, March 1985 to February 1995.

Vice Provost for Computing and Planning, Carnegie-Mellon University, March 1981 to December 1984.

Adjunct Associate Professor of Urban Systems and Public Policy, Carnegie-Mellon University, November 1981 to December 1984.

Assistant Professor of Government, Cornell University, July 1970 to March 1981.

Director of Academic Computing and Acting Director of Central Computing Services, Cornell University, September 1980 to March 1981.

Director of Academic Computing and Associate Director of Computer Services, Cornell University, April 1978 to September 1980.

Assistant Director for User Services, Cornell University, July 1976 to April 1978.

Selected Achievements:

Leadership in the creation and implementation of the Internet2 project and the University Corporation for Advanced Internet Development.

Leadership in the creation and management of the National Science Foundation Network as Board Chair of MERIT, Chair of the NSFnet Executive Committee, and founder and Board Chair of Advanced Network and Services, Inc.

Leadership in the creation and management of a leading information technology environment at the University of Michigan as Vice Provost for Information Technology.

Leadership and management of the Andrew distributed computing project at Carnegie-Mellon University as Vice Provost for Computing and Planning.

Not for profit board leadership at Merit, Advanced Network & Services, Environmental Institute of Michigan and Altarum.

Grants:

"EAGER: The NSF Role in the Development of the Internet," National Science Foundation, 2014-2016.

Awards and other recognition:

1986, CAUSE National Leadership Award

2002, EDUCAUSE Excellence in Leadership Award

2005, Iowa State University, College of Liberal Arts and Sciences, John V. Atanasoff Discovery Award for distinguished alumnus who have furthered scientific knowledge of the world.

2008, The Thomas Hart Benton Mural Medallion, Indiana University, for distinction in public office or service, a significant relationship to Indiana University or Indiana, significant service to IU programs, students, or faculty, significant contribution to research or support for research. The medal also recognizes individuals who are shining examples of the values of IU and the universal academic community.

2014, Internet Hall of Fame

2017, Honorary Degree, Doctor of Science, Indiana University

Education:

Bachelor of Science, Iowa State University, 1965, Government.

Doctor of Philosophy, Indiana University, 1974, Government

Thesis Advisor: Elinor Ostrom, Arthur F. Bentley professor of political science and professor of public and environmental affairs

Academic fields:

Information systems planning and management, not-for-profit organization management, strategic planning, simulation models of political and public policy processes, economic models of politics, and technology assessment.

Professional organizations and leadership responsibilities:

Adaptec, Inc. (Board, 2002-2009 [Chair, Governance Committee, 2004-2009])

Advanced Network & Services, Inc. (Board of Trustees [Chairman 1990-2000], 1990-2014)

Advanced Infrastructure Ventures (Board of Advisors, 2001-2005)

Altarum Institute - formerly Environmental Research Institute of Michigan (Board of Trustees [Chairman 1997-2001], 1996-2011)

Arbor Venture Partners II, LLC (Executive Advisory Board, 1999-2003)

American Association of Universities Committee on Information Technology (Member, 1994-97)

AT&T Technical Advisory Board (1999-2002)

BITNET (Board of Trustees, 1988-89)

Carnegie-Mellon University (Information Technology Review Board, 1989)

Carnegie-Mellon University (Computing Services Board, 1992)

CICNET (Board of Trustees, 1988-97)

Coalition for Networked Access to Information (Institutional Representative, 1990-97)

Commission on Preservation and Access (Technology Assessment Advisory Committee, 1989-96)

Consortium for International Earth Science Information Network (Board of Trustees [Secretary, 1994-97], 1989-97)
Consortium for Research in Telecommunications Policy and Strategy (Chairman of the Board, 1994-96)
Corporation for Research and Education Networking (Board of Trustees, 1989-91, 1994-97)
Council on Competitiveness, (21st Century Information Infrastructure Project Advisory Comm., 1992-94)
Diamondhead Ventures, L.L.C. (Advisory Board, 2001-2010)
EDF Ventures, L.P. (Technology Advisory Board, 2000-2002)
Enterprise Development Fund (Technology Investment Advisory Committee 1995-99)
EDUCOM (Board of Trustees [Vice Chair, 1987-91]; [Council Chairman, 1986-87]; [Program Chairman, 1989]; [Network and Telecommunications Task Force 1987-] 1986-91)
Ignitus Communications (Manager, Member Committee 1999 - 2000)
National Research Council Study: Impact of Information Technology on the Future of the Research University (Steering Committee 2001-3)
Iowa State University (LAS Dean's Council, 1998-) (Chair, 2005-2006)
Internet Hall of Fame Advisory Board (2016-)
Internet2 Steering Committee (1996-7)
Interuniversity Consortium for Educational Computing (Cofounder, 1984)
Massachusetts Institute of Technology (External Review Committee, 2000)
MERIT Network Board of Trustees ([Chairman 1986-1990, 1997] 1986-)
Michigan Information Technology Commission (1997-98)
Michigan Information Technology Center Foundation (Board of Trustees and Chair, 1997-2011)
Michigan Virtual High School (Project Advisory Council, 2001-2)
Michigan Virtual University (1999-2001)
Midwest Technology Development Institute (State of Michigan Delegate, 1986-88)
National Association of State Universities and Land Grant Colleges, Higher Education and Technology Committee (Member, 1995-97)
National LambdaRail (Board of Trustees, 2003-6)
National Medal of Technology Nomination Evaluation Committee (Member 1998-2002)
National Science Foundation (Computer and Information Sciences and Engineering Advisory Committee, [Chair, Network Infrastructure Review Committee, 1996] 1995-1999)
NSFnet Executive Committee (Chair, 1988-95)
NSFnet Anniversary Planning Committee (2006-7)
Online College Library Center (Research Advisory Committee, 1985-1987)
Syntel, Inc. (Director, 1997 - 2005 [Chair, Governance Committee, 1998-2005])
Seminars on Academic Computing (Program Committee, 1981-82)
Simulation Symposiums (President, 1971; Grants Chairman, 1972-75)
The National Academies (Government University Industry Research Roundtable, 2001-2006)
VRVS Global Corporation (Advisory Board, 2002-4)

Personal information:

Born: September 20, 1943, Kansas City, Missouri
Married to: Andrea Parks Van Houweling, August 28, 1965
Children: Robert and Benjamin

Selected publications:

"Toward a science of learning systems: a research agenda for the high-functioning Learning Health System," Charles Friedman, Joshua Rubin, Jeffrey Brown, Melinda Buntin, Milton Corn, Lynn Etheredge, Carl Gunter, Mark Musen, Richard Platt, William Stead, Kevin Sullivan, Douglas Van Houweling (2014), Journal of the American Medical Informatics Association, 22(1), 43-50.

- "The Obama Administration and Internet Policy," *Obama in Office*, James A. Thurber, editor, Paradigm Publishers, March 2011.
- "Beyond Convergence: How advanced networking will erase campus boundaries," Douglas Van Houweling. ACUTA Journal, Spring 2007.
- "In Search of the Killer App: The Internet2 Experience and the Promise of Advanced Broadband," Ted Hanss and Douglas Van Houweling. Chapter in Austin, Robert D., and Stephen P. Bradley, eds. *The Broadband Explosion: Leading Thinkers on the Promise of a Truly Interactive World*. Boston: Harvard Business School Press, July, 2005.
- "The Development of Institutional Strategies," James J. Duderstadt, Daniel E. Atkins and Douglas E. Van Houweling, *EDUCAUSE Review*, Volume 38, Number 3, May/June 2003.
- "Delivering Value by Preserving Values: An Interview with Douglas Van Houweling," *EDUCAUSE Review*, Volume 38, Number 2, March/April 2003.
- Higher Education in the Digital Age: Technology Issues and Strategies for American Colleges and Universities*, James J. Duderstadt, Daniel E. Atkins and Douglas E. Van Houweling. The Oryx Press and the American Council on Education, Westport, Connecticut, December 2002
- "Knowledge Services in the Digitized World: Possibilities and Strategies," *Electronic Access to Information: A New Service Paradigm*, The Research Libraries Group, Inc., Mountain View, California, July 1993.
- "The Evolving National Information Network: Background and Challenges," with Michael McGill, A Report of the Technology Assessment Advisory Committee to the Commission on Preservation and Access, 1400 16th Street, NW, Suite 740, Washington, D. C. 20036, July 1993.
- "The National Network: A National Interest," *EDUCOM Review*, Volume 24, Number 2, Summer 1989.
- "The Information Network: Its Structure and Role in Higher Education," *Library Hi Tech*, Volume 5, Number 2, Summer 1987.
- "The Information Technology Environment of Higher Education," *Campus of the Future -- Conference on Information Resources*, OCLC Library, Information, and Computer Science Series, Online Computer Library Center, 6565 Frantz Road, Dublin, Ohio, 1987.
- "Information Technology: A Survey from the Perspective of Higher Education," *Library Hi Tech*, Volume 4, Number 4, Winter 1986.
- "The Network Imperative for Information Technology in Higher Education," *CAUSE/EFFECT*, Volume 8, Number 4, July 1985.
- "Information Processing Futures for Higher Education," *EDUCOM Bulletin*, Volume 18, Number 3/4, Fall/Winter 1983.
- "The Future of Computing at Carnegie-Mellon University," with Keith Slack, Jim Morris, and Nina Wishbow, Proceedings, *COMPCON Fall 1983 Conference*, Institute of Electrical and Electronic Engineers -- *Delivering Computer Power to End Users*, IEEE Computer Society, 1109 Spring Street, Suite 300, Silver Spring, Maryland 20910.
- "Workstations for All at Carnegie-Mellon," *Local Networks: Distributed Office and Factory Systems*, Online Publications Ltd., Pinner Green House, Ash Hill Drive, Pinner, HA5 2AE, Middlesex, UK, 1983.
- "Carnegie-Mellon University," *Campus Computing Strategies*, John W. McCredie, ed., Digital Press, Educational Services, Digital Equipment Corporation, Bedford, Massachusetts, 1982.
- "Strategic Planning Methodology for Computing," *Proceedings: Twelfth Annual Seminar for Academic Computing Services*, Snowmass, Colorado, August 10, 1981.
- "Financing User Services in the '80's," *Proceedings: ACM SIGUCC User Services Conference VIII*, Association for Computing Machinery, New York, New York, 1981.
- "Planning for Research Computing," *Planning for Computing in Higher Education -- Proceedings of the 1979 EDUCOM Fall Conference*, EDUCOM, Princeton, New Jersey, 1980.
- "Meeting the Challenge of Diversity and Change: Cornell Computing Services," *EDUCOM Bulletin*, Vol. 14, No. 3, Fall 1979.

- "The Interactive Gaming Simulation Language: An Introduction," *Proceedings: Winter Computer Simulation Conference*, The Society for Computer Simulation, La Jolla, California, 1976.
- "The Use of Interactive Computing in Large Scale Urban Gaming Simulations," *Proceedings: 14th Annual Conference of the North American Simulation and Gaming Association*, Jolene Elliot, et. al., eds., University of Southern California Press, Los Angeles, California, 1976.
- "GPSS/SIMSCRIPT - The Dominant Simulation Languages," with Ira M. Kay and Thomas M. Kisko, *Proceedings: Eighth Annual Simulation Symposium*, Tampa, Florida, 1975.
- A Microeconomic Theory of Political Participation*, Doctoral dissertation, Indiana University, July, 1974.
- "Sources of Leadership in a Rural Community," *Anatomy of Twentieth Century Village Life*, National Board of Missions, Methodist Church, USA, July, 1968.
- "A Balance of Power Simulation of the International System," *Proceedings: First Annual Simulation Symposium*, Tampa, Florida, 1968.

Selected lectures, presentations, and courses:

- "US Science Policy and the Internet," US Government Today: What Would the Founders Say?, Symposium at the American University of Sharjah, Dubai, UAE, April 16 2014.
- "Advanced Cyber-infrastructure for Scientific Data Applications", Fourth US-China Roundtable Meeting on Scientific Data Cooperation, Board on Research Data and Information, Policy and Global Affairs, The National Academies, Irvine, CA, March 29, 2010.
- "Futuristic Technology and Potential Implications." GITEC Summit, Orlando, FL; March 8, 2010.
- "Internet2 and the Internet2 International Program." The Middle East Regional Interest Group Meeting, Carnegie Mellon University- Doha, Qatar; January 30, 2010.
- "The Forces Now Shaping Internet Development and Use in the US." Conference on American Government, Politics and Policy, The American University at Sharjah, Dubai, Saudi Arabia; January 24-26, 2010
- CANS2010, Welcome remarks and panel facilitator, Beijing; December 3-5, 2009
- GEANT Launch, Stockholm, December 1-3, 2009
- "The Development of the Internet: Implications for the Future." Distinguished Lecture Series, Baskin School of Engineering, University of California, Santa Cruz, 4 February 2009.
- "Internet2 – Research and Education Network," CANARIE/ORION Summit, Toronto, Canada, 4 November 2008.
- "Research and Education Networks: Platforms for network innovation among academia, industry and government," OECD Ministerial Forum on the Future of the Internet Economy, Seoul, South Korea, June 16, 2008.
- "Internet2: The Future," WiscNet Futures Technology Conference, Madison, WI, May 13, 2008.
- "Roundtable on Internet Infrastructure," Panel discussion; Tech Policy Summit, Hollywood, CA, March 27, 2008.
- "Meeting the Cyberinfrastructure Challenge," International Committee for Future Accelerators (ICFA) Workshop, Mexico City, October 25, 2007.
- "Information Technology & the Future of Higher Education," University of Maryland University College Futures Think Tank, Baltimore, MD, September 20, 2007.
- "Markers, Milestones & New Directions," 2007 Great Plains Network Annual Meeting, Kansas City, MO, May 31, 2007.
- "The Coming Next Revolution in Advanced Networking," IHETS Summit, Indianapolis, IN, March 30, 2007.
- "Platform for Innovation: Research and Education Networks: Where Does the US Stand? Implications for Mexico," CUDI Réunion Primavera, Toréon, Mexico, March 22, 2007.

- "Introduction to Internet2: Overview and Discussion," NSF Internet2 Day, October 19, 2006.
- "Internet2 Overview: Impact of NFP R&D organizations on Economic Development," Michigan Economic Developers Association Economic Development Course, September 13, 2006.
- "IPv6 and the US higher education and research networking community." IPv6 EU Expert Conference, Vienna, Austria, June 2, 2006.
- "The State of Emerging Internet Technologies and the Impact on Digital Archiving." Archiving 2006 Conference, Ottawa, Canada, May 25, 2006.
- "Beyond Tomorrow's Internet." University of Alaska, Fairbanks, Internet2 Day, Fairbanks, AK, March 23, 2006.
- "Beyond Tomorrow's Internet." Dow Jones Network Ventures 2006, February 8, 2006, San Jose, CA.
- "Internet2: Focusing on the Future." Internet2 Fall Member Meeting, Philadelphia, PA, September 20, 2005.
- "The Power of Community." Internet2 Spring Member Meeting, Arlington, VA, May 5, 2005.
- "The next steps for research and higher education advanced networking infrastructure in the US," Keynote Address, CANS 2005, Shenzhen, China, November 1, 2005.
- "The Future of Advanced Networking for Higher Education," with Tracy Futhey, Chair, NLR Board, EDUCAUSE 2004, October 18, 2004, Denver, CO.
- "The Future of the Internet." CERNET 10th Anniversary, Beijing, China, December 25, 2004 (via videotape).
- "The Future of Collaboration: U.S. and China and Advanced Networks for Research, Teaching and Learning." CANS2004 Conference, November 30, 2004, Miami, FL.
- "University of Arizona-Internet2 Day," Tucson, AZ, November 4, 2004.
- "The Future of Advanced Networking for Higher Education." EDUCAUSE, October 20, 2004, Denver, CO.
- "Internet2: Opportunities." CUDI, October 15, 2004, Acapulco, México (via videoconference).
- "Internet2 Overview." Brookings Institute CIO Roundtable Luncheon, October 20, 2004, Washington, DC.
- "Advanced Networks - The Past and The Future: The Internet2 Perspective." APAN, July 7, 2004, Cairns, Australia.
- "Enabling research, teaching and learning with a high performance network environment: The Internet2 experience." SingAREN, Singapore, June 30 2004.
- "Internet2 Living in the Future," Broadband Summit, April 20, 2004.
- "Internet2: Integrated Innovation," National Internet2 Day, March 18, 2004.
- "Advancing Real-Time Communication on Campus," Voice on the Net Conference, March 10, 2004, San Jose, CA.
- "In Search of the Killer App: The Internet2 Experience," Keynote address, Harvard Business School Colloquium, April 24, 2003.
- National Advisory Research Resources Council (NCRR), NIH, Bethesda, MD, May 16, 2002
- "Security." Higher Education Information Technology Alliance Forum, Washington, DC, March 11, 2002
- "Network of the Future." New America Foundation, Washington, DC, January 31, 2002
- "Overview of Manufacturing, Infrastructure and Internet2 Activities." 2002 US/Africa/South America Materials Workshop on Civil Infrastructure and Manufacturing, San Juan, PR, January 7, 2002
- "Development and Future of the Internet (SI605)." University of Michigan, Ann Arbor, MI, Winter 2001 and 2002
- "The Development of the Digital Library Environment at U-M." Digital Library Federation, Ann Arbor, MI, December 10, 2001
- Testimony before the NSF Advisory Committee on Cyber Infrastructure, Washington, DC, November 30, 2001

- "E-Science Infrastructure." The National Academies, Committee on Science, Engineering, and Public Policy, Washington, DC, November 20, 2001
- "The Future of the Internet." Orbis Forum, Chicago, IL, October 17, 2001
- "Procuring Lambdas." Session Chairman, International Lambda Workshop, Amsterdam, Netherlands, September 12, 2001
- "What are the IT Drivers for Change in Research Universities?" National Academy of Sciences, Government-University-Industry Research Roundtable, Washington, DC, June 20, 2001
- "The Future of the Internet." SUPERCOMM 2001, Executive Program Workshop, Speaker and Workshop Moderator, Atlanta, GA, June 5, 2001
- "Information Systems, Simulation Models, and Technology Assessment." Frontiers in Education and Research, Ann Arbor, MI, May 30, 2001
- "Making Internet Policy in Congress." Congress and the Internet Roundtable, Center for Congressional and Presidential Studies, American University School of Public Affairs, Washington, DC, May 4, 2001
- "Networking Futures on Campus and Internet2." University of Wisconsin Area Wide IT Conference, The Dells, WI, May 3, 2001
- "Internet2 and the Future of the Internet." ITEC-Ohio Windows on the Future, Columbus, OH, March 30, 2001
- "What is Internet2." Keynote Speaker, MichNet 2001 Spring Seminar, Warren, MI, April 12, 2001
- "Internet2 Update." Keynote Speaker, CANS 2001, Rockville, MD, March 12, 2001
- "Internet Futures " Metropolitan Club, Washington, DC, March 6, 2001
- "Beyond the Internet: A Look at the Development of the Internet2," Greater Detroit Entrepreneurs Network, Detroit, MI, February 14, 2001
- "Reassessing the Future of Local Competition: Five Years Out." Association for Local Telecommunications Services Executive Summit, Chicago, IL, October 26, 2000
- "Internet2 Update." EDUCAUSE, Nashville, TN, October 12, 2000
- "Internet2, Too." Special Seminar, Cable '99, Chicago, IL, June 13, 1999.
- "Internet2." Plenary Presentation, Vortex Annual Conference, Laguna, CA, May 27, 1999.
- "Realizing the Power of the Internet: Internet2." Council on Foundations Annual Meeting, New Orleans, LA, April 21, 1999.
- "Internet2 and the Globalization of Scholarship." Palmer Lecture, Pennsylvania State University, State College, PA, November 5, 1998.
- "Internet2: Enabling Our Collaborative Future." Telecon XVIII, Anaheim, CA, October 28, 1998.
- "Collaboration and Internet2." Association of Pacific Rim Universities, Seoul, Korea, June 23, 1998.
- "Intangible Value, Distributed Organizations, and the Internet World." Plenary Address, Marshall Symposium, University of Michigan, Ann Arbor, Michigan, May 29, 1998.
- "Internet2, the Next Generation." CITEC Annual Conference, Madrid, Spain, March 4, 1998.
- Testimony on Internet2 and the Next Generation Internet. Unites States Senate Subcommittee on Communications, Committee on Commerce, Science, and Transportation, Washington, DC, June 3, 1997.
- "Off the Campus and Out of the Box: Higher Education's New Opportunity." American Association for Higher Education Conference, Principle Address, Washington, DC, March 18, 1997.
- "Higher Education's Role in Realizing Tomorrow's Information Services Environment." Association for Library and Information Science Education (ALISE) Conference, Keynote Address, Washington, DC, February 14, 1997.
- "Internet II and Key Information Technology Issues for Campus Leaders." Commission on Information Technologies, National Association of State Universities and Land Grant Colleges Conference, San Diego, California, November 18, 1996.

- "The Evolution of Network Dependent Applications and the Role of Research Universities in the Future Internet." American Association of Universities, Presidential Briefing, Pasadena, California, October 21, 1996.
- "Commercialization of the Information Superhighway: How It Will Affect Higher Education," Video Conference, STARLink, Dallas, Texas, April 18, 1996.
- "The Future of Higher Education and the Future of the Internet." EDUCOM Networking and Telecommunications Task Force, Keynote Address, Washington, DC, April 15, 1996.
- "Competition and Collaboration for Higher Education's Future," National Learning Infrastructure Initiative, Keynote Address, New Orleans, Louisiana, January 22, 1996
- "Computers and Technology -- Implications for College and University Attorneys," National Association of College and University Attorneys Invited Address, St. Louis, Missouri, March 13, 1994.
- "Future Impacts of Information Technology on the Electric Power Industry," The Electricity-Society Connection Forum, Electric Power Research Institute, Carmel, California, February 15, 1994.
- "The Challenge of the New Medium," Keynote Address to the Twelfth IEEE Symposium on Mass Storage Systems, Monterey, California, April 26, 1993.
- "The Gigabit Network and Research -- Challenges for the Future", Symposium on Gigabit Networks, Washington, D. C., July 17, 1991.
- "The Privatized National Research and Education Network: Marketplace and Public Policy Issues," Statement to the United States Office of Technology Assessment Forum, Washington, D. C., February 14, 1991.
- "Information Technology," Keynote Address for the United States National Archives Technology Forecast Conference, Washington, D. C., March 20, 1993.
- "Toward the Gigabit Network: Prospects and Challenges," Invited Paper for the Library of Congress Preconference for the White House Conference on Libraries, Washington, D. C., December 18, 1990.
- "The National Research and Education Network: Implications for the Legislative Branch," Presentation to the United States Legislative Branch Network and Telecommunications Working Group, Washington, D. C., July 26, 1990.
- "NSFnet: Its Status, Future, and the Role of the Library Community," American Library Association Annual Conference, Chicago, Illinois, June 25, 1990.
- "Telecommunications and Higher Education," Fulfilling the Promise for the 1990's: Conference on Telecommunications Technologies for Industry, Consumers, and Education, University of Pennsylvania, Philadelphia, Pennsylvania, March 24, 1990.
- "Scholarship and Information Technology: Issues of Cooperation, National Agenda, and Common Purpose," Annual Meeting, American Association of Universities, Ann Arbor, Michigan, October 22, 1989.
- "Computer Technology: What to Expect," National Association of College and University Business Officers, Senior Financial Officers Seminar, Palm Desert, California, May 22, 1989.
- "Supercomputing, Networking, and Information: The Knowledge Symbiosis of the Nineties," Plenary Address, SUPER! Conference, Lexington, Kentucky, April 24, 1989.
- "Education in the Knowledge-Based World," Plenary Address, Annual Tennessee Regents Conference, Nashville, Tennessee, April 10, 1989.
- "Technology Management in the Knowledge-Based Organization," Keynote Address, Annual Meeting, Association of College and University Telecommunications Administrators, San Diego, California, July 18, 1988.
- "Information Technology and Education: Background, Goals, and Prospects," IBM Dean's Conference, Ann Arbor, Michigan, June 15, 1988.
- "NSFNet: One Step Toward a National Network," Plenary Address, National NET'88, Washington, D. C., April 19, 1988.

- "Information Technology Integration: The Role of the Workstation," Banquet Address, Workstation Symposium '85, AT&T Bell Laboratories, Naperville, Illinois, October 30, 1985.
- "Information Technology in Higher Education: Prospects for the Future," Central Association of College and University Business Officers Annual Meeting, Boyne Highlands, Michigan, October 9, 1985.
- "The Prospects for a National Higher Education Network," Plenary Address, EDUCOM '85, Austin, Texas, October 4, 1985.
- "Strategies for Information Technology Integration," Keynote Address, Association for Computing Machinery Special Interest Group in University Computing Center Services User Services Conference, Toledo, Ohio, October 1, 1985.
- "Integrated Information Technology on Campus," Keynote Address, Annual Meeting, Association of College and University Telecommunications Administrators, Banff, Alberta, Canada, July 1, 1985.
- "The Wired University and Higher Education; Promise versus Reality," American Academy for the Advancement of Science Annual Conference, Los Angeles, California, May 30, 1985.
- "The Carnegie-Mellon University Campus Computing Project: Implications for Higher Education," Keynote Address, Second Annual SUN User Group Conference, Boston, Massachusetts, November 5, 1984
- "Telecommunications Planning and Management for Decision-Makers," National Association of College and University Business Officers, New Orleans, Louisiana, November 5, 1984.
- "Trends and Prospects: Personal Computing, Academia, and Industry," Fourteenth Annual Seminar on Academic Computing Services, Snowmass, Colorado, August 8, 1983.
- "Libraries, Literacy, and the Information Society," Symposium on the Future of Literacy, University of Maryland, College Park, Maryland, April 1, 1983.
- "Information Processing at CMU -- A Strategic View," American Association of Higher Education, Washington, D. C., March 28, 1983.
- "The Challenge of PAC-MAN to the Future," 96th Annual Meeting of the National Association of State Universities and Land-Grant Colleges, St. Louis, Missouri, November 8, 1982.
- "Strategic Planning for Academic Services," 65th Annual Meeting of the American Council on Education, Minneapolis, Minnesota, October 14, 1982.
- "Micro-Computers and Administrative Applications," 1981 CAUSE National Conference, St. Louis, Missouri, December 4, 1981.
- "The Computer Revolution: Implications for Higher Education," Council of Colleges of Arts and Sciences Annual Meeting, Lake Tahoe, Nevada, November 12, 1981.
- "Academic Strategic Planning: Improving Quality in Education and Research," 64th Annual Meeting of the American Council on Education, Washington, D. C., October 15, 1981.
- "The Role of Planning Models," Eleventh Annual Seminar for Academic Computing Services, Snowmass, Colorado, August 5, 1980.
- "Financing Computing Services in the '80's," Seventh SIGUCC Computer Center Management Symposium, St. Louis, Missouri, March 27, 1980.
- "Computer Service Rates and User Support," Seventh SIGUCC User Services Conference, Los Angeles, California, October 2, 1979.
- "Pricing and Charge-Out for Computing Services: Policy and Operational Issues," EDUCOM Seminar Series, April 1979 - July 1980.
- "Computer Applications in Management and Research," Intensive Semester Course (P.A. 501), University of Southern California, School of Public Administration, March - May, 1977.
- "Urban Affairs Laboratory" (Government 312), Cornell University, Department of Government, 1971-81.

Board experience:

I have provided board leadership for both for profit and not for profit (nfp) companies and organizations. On the for profit public corporation boards, Syntel and Adaptec, I chaired the board governance committees where my primary responsibilities were recruiting new board members and insuring the boards met high governance standards. At Ignitus, I assisted the launch of a telecommunications equipment startup and eventual sale. In the nfp sector my main focus was organization change. At EDUCOM, I prepared the way for a merger with CAUSE, another higher education information technology organization, to create EDUCAUSE. At Merit, I not only initiated and oversaw the NSFNET project, but also created a spinout nfp, Advanced Network and Services, from which a for-profit subsidiary was created and sold to America Online to enable the commercialization of Internet technology. The proceeds were utilized to support ThinkQuest, a contest which engaged you people in creating educational content for the Internet. At the Environmental Institute of Michigan, I chaired the Board when it spun off ERIM International as a for profit which was subsequently acquired by General Dynamics. The proceeds allowed the creation of a new nfp, Altarum, a research and contracting organization focused on improving the nation's health and assisting government agencies in serving to achieve a healthier nation. As a result, I developed considerable expertise in enabling productive transitions and relationships across the for profit and not-for-profit corporate boundaries.

Consulting experience:

Since 1968 I have provided consulting and educational services to a broad array of organizations. As the client list below shows, while majority of my clients have been in higher education, I have undertaken substantial assignments in business and government. During the 70's, General Electric, the Center for Naval Research, Southern Simulation Service, the U. S. Air Force, the American Association of Railroads and Dow Chemical contracted for support in the construction of computer simulation models of significant business processes. For example, my work enabled General Electric to support and market a general computer simulation language (Simscrip) as a product. Building on that experience and the transfer of technology and strategy developed at Cornell, Carnegie-Mellon, and the University of Michigan, I made strategy and motivational presentations to senior management and key customers of Digital Equipment Corporation, General Electric, IBM, MCI, Sun Microsystems, and the National Archives. I have provided strategic advice at the senior executive and Board level to the World Bank, Apple Computer, NeXT, the Bay Area Regional Network, the Pennsylvania Regional Network, the Handelman Company, the U.S. Congress, and Bellcore. For example, I advised the World Bank on organization and financial strategy for internal computing services, Apple and NeXT on product strategy, the House of Representatives on information systems architecture, the regional networks on asset divestiture, and Bellcore on Internet strategy.

University of Alabama at Birmingham
 Apple Computer
 Bellcore
 University of California at Berkeley
 Center for Naval Research
 University of Colorado
 Columbia University
 Emory University
 General Electric Corporation
 Harvard University
 Indiana University
 Lawrence Berkeley Laboratory
 Louisiana State University
 Mercyhurst College

American Association of Railroads
 BARRNet
 California Institute of Technology
 Case Western Reserve University
 Clarkson College
 Colorado School of Mines
 Digital Equipment Corporation
 Dow Chemical Corporation
 Handleman Company
 IBM Corporation
 Iowa State University
 Los Alamos National Laboratory
 University of Maryland
 MCI

Michigan State University
State of New Jersey
NeXT
University of Pennsylvania
PREPNet
Sun Microsystems
Southern Simulation Service
Taligent
United States Congress
Wabash College
World Bank

University of New Hampshire
State University of New York at Binghamton
Northwestern University
Pennsylvania Bell Telephone Company
Queens University
University of Southern California
Stanford University
United States Air Force
United States Naval Academy
University of Wisconsin