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February 2023

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Publications

Books and edited volumes

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 13. (and Sarah Gulick), “Zebra Medical Vision.” Harvard Business School Case, 619053. November, 2018.
 14. (and Sarah Gulick), Teaching note for “Zebra Medical Vision.” July, 2019.
 15. (and Christine Snively). “Internet Data Capping Note (B).” Harvard Business School Technical Note 618-061, March, 2018.

16. (and Christine Snively). "Viacom: Democratization of Data Science." Harvard Business School Case. March 2018.
17. (and Feng Zhu and Kerry Herman). "Korea Telecom: Building a GiGAtopia." Case 617-014, April 2017.
18. (and Feng Zhu and Susie L. Ma). "Korea Telecom: Building a GiGAtopia. (B)." Case 520-060, December, 2019.
19. (and Feng Zhu and Susie L. Ma). "Korea Telecom: Building a GiGAtopia (A) and (B), Teaching Note. January, 2020.
20. (and Christine Snively). "Great Lakes Banking Group: Data Management." November 2017. TBD.
21. (and Christine Snively), "Net Neutrality: A Managerial Perspective." Technical Note 617-006, July 2016.
22. (and Christine Snively and Lisa Cox), "Internet Data Capping Note. (A) and (B)." Harvard Business School Technical Note 617-003, (Revised October 2016.)
23. (And Michael Norris). "Streaming Over Broadband: Why Doesn't My Netflix Work?" Harvard Business School Case 616-007, November 2015.
24. (And Michael Norris), "Streaming Over Broadband: Why Doesn't My Netflix Work?" Teaching Note for Harvard Business School Case 616-007, December 2016.
25. (And Marco Iansiti, and Christine Snively). "Facebook: The First Ten Years." Harvard Business School Case 616-012, October 2015.
26. (And Joshua Polhaus and Micheline-Marie Sabatte) MentorMob and the Reinvention of Learning, August, 2011. (KEL627)
27. Teaching Note: MentorMob and the Reinvention of Learning, August 2011.
28. (And Michelle Devereux). Wikipedia in the Spotlight. August, 2006. Revised August, 2009.
29. Teaching note: Wikipedia in the Spotlight, November, 2006.
30. (And Michelle Devereux). The Crisis at Encyclopaedia Britannica. August, 2006. Revised August, 2009.
31. Teaching note: The Crisis at Encyclopedia Britannica. August, 2006. Revised August,

2009.

32. (and Rebecca Frazzano and Evan Meagher) The Triumph of the Commons: Wikia and the Commercialization of Open Source Communities in 2009. (KEL464)
33. Teaching note: The Triumph of the Commons: Wikia and the Commercialization of Open Source Communities in 2009, November, 2009.

Book Reviews

1. 2016, May-June, *Harvard Magazine*, "How America Grew: A Definitive Economic History – and a Debatable and Despairing Forecast," a review of Robert J. Gordon, *The Rise and Fall of American Growth: The U.S. Standard of Living Since the Civil War* (Princeton University Press). Pp. 68-69.
<http://harvardmagazine.com/2016/05/how-america-grew>
2. 2015, May 26. "Moore's Law; The Life of Gordon Moore, Silicon Valley's Quiet Revolutionary, By Arnold Thackray, David Brock, and Rachel Jones. Basic Books, New York." *Wall Street Journal*. <http://www.wsj.com/articles/silicon-valleys-lawmaker-1432590193>
3. 2014, "The economics of information security and privacy" Edited by Rainer Bohme, 2013, Springer-Verlag; Berlin Heidelberg. xii, 321., *Journal of Economic Literature*, LI, December. Pp 18-19.
4. 2011, December, "The Wifi Journey," Edited by Wolter Lemstra, Vic Hayes, John Groenewegen, *IEEE CS Computing Now*, <http://www.computer.org/portal/web/cnbooks>
5. June, 2005 "Innovation and Growth: Selected Economic Papers" by Jean-Phillipe Touffut, *Journal of Economics Literature*. XLII, pp 527-29.
6. 2004, "Technology and the New Economy," by Chong-en bai and Chi-wa Yuen, *Journal of Economic Literature*.
7. 2003, "Bandwagon Effects in High Technology Industries," by Jeffrey H. Rohlfs, *Journal of Media Economics*, 17(3), 229-232.
8. October, 2002, "Markets for Technology: The Economics of Innovation and new Technology," by Ashish Arora, Andrea Fosfuri, and Alfonso Gambardella, *Academy of Management Review*.
9. February, 1999, "Talk is Cheap, By Robert W Crandall and Leonard Waverman," The Brookings Institute, *Telecommunications Policy*.

10. December 1997, "*The International Computer Software Industry, A Comparative Study of Industry Evolution and Structure.*" Edited by David C. Mowery," Oxford University Press, New York. *Journal of Economic Literature*.
11. March 1995, "*Price Measurements and Their Uses*, Edited by Murray F. Foss, Marilyn E. Manser, and Allan H.," *Journal of Economic Literature*, Vol XXXIII, pp 214-16.
12. December, 1992, "*Regulation: Economic Theory and History*, By Jack High, Editor" *Journal of Economic History*, pp. 982-983.
13. December 1989, "*Technical Change and Economic Theory*, by Giovanni Dosi, Christopher Freeman, Richard Nelson, Gerald Silverberg and Luc Soete," *Journal of Economic Literature*, Vol. XXVII, 4, pp 1714 - 1716.
14. September 1989, "*Competition: The Economics of Technical Change*, by Paul Auerbach" *Journal of Economic History*, Vol XLIX, 3.
15. April 1988, "*Targeting the Computer: Government Support and International Competition*, by Kenneth Flamm," in *Annals of the History of Computing*, Vol 10,2.

Working papers submitted for publication and under revision

December 2023, (and Raviv Murciano-Goroff, and Ran Zhuo). "Upgraded software and embedded improvements: Tracking Vulnerabilities and Bugs on the Web.

January 2024, (and Nataliya Wright and Frank Nagle), "Contributing to Growth? The Role of Open Source Software for Global Startups." HBS Working Paper. 24-040.

December 2023, (and Tim Bresnahan), "New Economic Forces Behind the Value Distribution of Innovation."

September 2022, (and Klaus Ackerman), "The State of Open Source Server Software."

June 2022. (Tommy Pan Fang). "Where the Cloud Rests: Data Centers." HBS Working Paper 21-042.

September 2021, (and Ruiqing Sam Cao), "Digital Labor Market Inequality and the Decline of IT Exceptionalism." HBS Working paper 21-019.

Working papers not submitted for publication and not otherwise accounted for

1. 2013, "The Lexicon of Network Economics: An Applied Guide."

2. *2011*, (and Anna Levine Taub), “Acquisitions in Communications Equipment: Lessons for the Commercialization of Innovation.”
3. *2002*, (and Jim Wade and David Barth), “Empirical Determinants of Product Obsolescence and the Product Life Cycle: An Application to the Commercial Mainframe Computer Market.”
4. *2000*, (and Cory Capps, David Dranove and Mark Satterthwaite) "The Elzinga-Horgarty Criteria and the Silent Majority Fallacy: A Critique and an Approach to Hospital Mergers." NBER Working Paper Series, Vol. w8216, pp. -, 2001. Available at SSRN: <http://ssrn.com/abstract=265309>
5. *August 2000*, "Contracting Terms for Dial-up Internet Access,"
6. *August 1999*, (and Tim Bresnahan and Harumi Ito), "The Sources and Effects of Investment Irreversibility: Large Scale Computing."
7. *September 1996* (and Pablo Spiller), "Estimating the Welfare Effects of Digital Infrastructure." NBER Working Paper # 5770.
8. *January, 1994*, "Did Computers Diffuse Quickly? Best versus Average Practice in Mainframe Computers, 1968-1983." Working Paper No. 4647, National Bureau of Economic Research, Cambridge, MA. February 1994.
9. *May 1989* (and Paul David), "Compatibility Standards and Information Technology -- Business Strategy, market Development and Public Policies: A Synopsis of Panelist's Statements and the Discussion at the CEPR Compatibility Standards Workshop.", Center for Economic Policy Research, Stanford University, Publication # 159. Committed to proposed Paul David book.

Recordings

- 2023, February, “Big Tech, Competition, and Innovation in the Digital Economy,” Weizenbaum Institute for the Networked Society, <https://www.youtube.com/watch?v=rfA7rgILU2Q>
-
- 2021, June, “Innovation, the Internet Age, and the Future,” Two Think Minimum, With Scott Wallsten and Sarah Oh, Technology Policy Institute. <https://techpolicyinstitute.org/2021/05/19/shane-greenstein-on-innovation-the-internet-age-and-the-future-two-think-minimum/>
-
- 2021, April. Wikipedia’s Twentieth Birthday. The Listening Post. Al Jazeera English. <https://youtu.be/V4mVXJiGVQI?t=856>
-

- 2019, April, Podcast, The Prognosis for AI-assisted radiology, Managing the Future of Work, <https://www.hbs.edu/managing-the-future-of-work/podcast/Pages/podcast-details.aspx?episode=9319487>.
- 2016, November. Why Wikipedia is the Best Place on the Internet. <https://digital.hbs.edu/platforms-crowds/di-talks-wikipedia-internet/>.
- 2016, May, The Decline of Encyclopedia Britannica and Emergence of Encarta, Strategic Management Society. <https://www.youtube.com/watch?v=Z9TnF1FwB6I>.
- 2016, April, How the Internet Became Commercial, Patterns in the Deployment of Technology, Alan Olsen's American Dreams. http://www.groco.com/radio/how_the_internet_became_commercial_patterns_in_the_deployment_of_technology.aspx, and <https://www.youtube.com/watch?v=NjrILune7YM>
- 2015, December, How the Internet Became Commercial, Initiative on the Digital Economy, Sloan MIT, Andre Fradkin, <http://mitsloan.mit.edu/ide/podcasts/> or https://soundcloud.com/mit_ide.
- 2015, November 12, Google Talk, How the Internet Became Commercial, <https://www.youtube.com/watch?v=NwbMhTkmfew&feature=youtu.be>
- 2015, April 28, CITP Lunchtime talk, Princeton, <https://www.youtube.com/watch?v=p1TLTDgNB-w>
- 2010 – present, Podcasts with IEEE, Micro Economics,. <http://www.computer.org/portal/web/computingnow/micro-economics>

1. *September 6, 2012*, The Wi-Fi Journey
2. *June 29, 2012*, The Open Internet Order
3. *June 13, 2012*, An Honest Policy Wonk
4. *March 2, 2012*, Steve Jobs and the Economics of one Entrepreneur
5. *February 3, 2012*, Direction of Broadband Spillover
6. *November 21, 2011*, Digital Dark Matter
7. *October 28, 2011*, Building Broadband Ahead of Digital Demand
8. *September 14, 2011*, Gatekeeping Economics
9. *August 17, 2011*, Digitization and Value Creation
10. *July 15, 2011*, Standardization and Coordination
11. *June 14, 2011*, Bleeding Edge Mass Market Standards
12. *May 24, 2011*, The Next Chapter at Google
13. *April 19, 2011*, Network of Platforms

14. *March 10, 2011*, Does Google Have Too Much Money?
15. *November 15, 2010*, Soccer Mom Messaging is the Poetry of Our Age.
16. *October 18, 2010*, Revolution in Spectrum Allocation.

- 2014, “On Bias in Wikipedia Articles,” March 11, 2014, Podcast, <http://surprisinglyfree.com/2014/03/11/greenstein/>, Hosted by Jerry Brito of the Mercatus Center, George Mason University.
- 2012, Is Wikipedia Biased? Interview for Kellogg Insight, December 1. http://insight.kellogg.northwestern.edu/article/is_wikipedia_biased/#,& <http://insight.kellogg.northwestern.edu/podcast/download/2231/#>.
- 2011, Interview with Professor Shane Greenstein: What has the Internet Done for the Economy? <http://www.kellogg.northwestern.edu/podcasts/insight/greenstein/shanegreenstein.mp3>, April 1.
- 2009, “7 Big Questions: Internet Regulation,” *IBM Forward View podcast*, http://www.ibm.com/businesscenter/smb/download/FV0911_ShaneGreens tein.mp3?ca=fv0911&me=feature5&re=ushomemp3
- 1997, Telecommunications Policy: The Changing Landscape. Policy Soundings Series, Institute for Government and Public Affairs. University of Illinois.

Blogs and active online sites

- 2011 – present, Digitopoly (and Joshua Gans and Erik Brynjolfsson), <http://www.digitopoly.org/>
- 2012 - present, Technology, Academics, Policy, <http://www.techpolicy.com/>
Among top 5 posts for 2012, [The Craigslist Killer and Online Privacy](#)
- 2013 - 2021. Data Sources: Economics of Digitization. <https://economicsofdigitization.hackpad.com/Data-sources-economics-of-digitization-8LSKSVZ38oR#:h=Internet-pricing>
- 2009 - 2015, Virulent Word of Mouse. (Sponsored by Kellogg School of Management) <http://virulentwordofmouse.wordpress.com/>.

Career Accomplishments and Milestones

Personal Life

US citizen.

Married. Children born May-97, January-99, November-01, September-03.

Education

- *June 1989*, Ph.D. Stanford University, Department of Economics.
- *June 1983*, B.A. University of California at Berkeley, Department of Economics.

Professional Positions at Universities

- *2016-present*, the Martin Marshall Professor of Business Administration, Technology Operations and Management Unit
- *2016-2022*, Co-Chair, Digital Initiative, Harvard Business School, Harvard University.
- *2015-2016*, the MBA class of 1957 Professor of Business Administration, HBS.
- *2011-2015*, Kellogg Chair in Information Technology. Northwestern.
- *2012-2015*, School of Communications, courtesy appointment. Northwestern.
- *2001 - 2011*, Elinor and Wendell Hobbs Professor of Management & Strategy.
- *2002-2005*, Department Chair, Management and Strategy, Kellogg School of Management, Northwestern University.
- *1997 - 2001*, Associate Professor, Department of Management and Strategy, Kellogg School of Management, Northwestern University.
- *1996 - 1997*, Associate Professor, Department of Economics & Institute of Government and Public Affairs, University of Illinois
- *1989 - 1996*, Assistant Professor, Department of Economics, University of Illinois at Urbana/Champaign.

Temporary Academic Appointments

- *July, 2013 – June, 2014*, Thomas Henry Carroll Ford Foundation Visiting Professor of Business Administration, Harvard Business School, and Fellow, Berkman Center for Internet and Society, Harvard University, and Visiting Scholar at the Center for Digital Business, Sloan School of Management, MIT.
- *June, 1994 - July 1995*, Visiting Scholar, Computer Industry Project, Center for Economic Policy Research, Stanford University, and Research Associate, Institute for Management, Innovation, and Organizations, Haas School of Business, University of California, Berkeley.
- *Fall Quarter, 1989*, Acting Assistant Professor of Economics, Stanford University
- *June - December, 1989*, Post-doctoral researcher, CEPR, Stanford University.

Membership in Academic Organizations

- American Economics Association
- International Industrial Organization Society
- Institute of Electrical and Electronic Engineers

Positions in Academic Organizations

- *2020-present*, co-organizer, NBER Tuesday productivity lunch seminar.
- *2014-present*, Faculty Associate, Berkman Center for Internet and Society.

- 1997- present, Research Associate, National Bureau of Economic Research, Digitization Program, Productivity group, Industrial Organization Group.
- 2010 – 2020, Co-director, Economics of Digitization, National Bureau of Economic Research.
- 1992-1997, Faculty Research Fellow, National Bureau of Economic Research.
- 1991- 96, Faculty Research Fellow, National Bureau of Economic Research, Productivity group.
- 2005-present, Research Associate, Conference on Research in Income and Wealth.
- 2000- 2015, Affiliate, Center for the Study of Industrial Organization, Northwestern University.
- 1999- 2015, Research Associate, Institute for Policy Research, Northwestern University.
- 1995 - 97, Affiliate, Institute for Government and Policy Affairs, University of Illinois.

Board Service

- 2024 US Copyright Office. Committee on Copyright and Artificial Intelligence.
- 2022 – present, *Journal of Evolutionary Economics*
- 2016 - present, Technology Policy Institute, Board of Academic Advisors.
- 2009 – present, Editorial Board, *Telecommunications Policy*.
- 1995 - 2023, Columnist and Board member, *IEEE Micro*
- 2014 – 2021, Advisory Board, *Research Policy*.
- 2015-2021, Board, Industrial Organization Society (President, 2014-2015, Vice President 2011-12).
- 2001 - 2014, Student paper committee reader, Telecommunications Policy Research Conference
- 2012 - 2013, Open Internet Advisory Committee, US Federal Communications Commission. http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0525/DA-12-829A1.pdf, Chair of working group on Economic Impacts.
- 2008 – 2012, Sub-editor, Economics and Business Department, *Communications of the Association of Computing Machinery*.
- 2008 – 2010, Co-Editor, *Information Economics and Policy*
- 2004 – 2007, Associate Editor, *Information Economics and Policy*.
- 2005 – 2010, Associate Editor, *Economics Bulletin*.
- 2009, Special issue on the 700 MHz auction” *Information Economics and Policy*.
- 2000 - 07, Editorial board, *Journal of Regulatory Economics*
- 2000 -2006, US Census Advisory Committee, American Economics Association representative.
- 2000 -02, Advisory Panel, Advanced Technology Program, National Institute of Standards and Technology, Department of Commerce.
- 2016, 2015, 2014, 2005, 2003, 2002, 2001, 2000, 1999, National Science Foundation, Review Panel.

Conference Organization

- *2023-present*, D³ research day organizer. Harvard Business School.
- *2023*, SSRC Workshop on the Economics of Social Media, New York. Scientific Committee.
- *2016-2022*, Digital Initiative Discussion and Symposium, Harvard Business School.
- *2011-2020*, Co-organizer (and Susan Athey, Erik Brynjolfsson, Hal Varian), NBER digitization conference, summer meetings, Cambridge.
- *2011-2019*, Co-organizer, NBER digitization conference, winter meetings (and Scott Stern), and student tutorial (and Avi Goldfarb), Stanford.
- *2019*, Co-organizer (and Tim DeStefano), “Business and Policy Perspectives on Digital,” Harvard Business School and the Organization for Economic Cooperation and Development. November 4-5.
- *2017*, Co-organizer (and Liran Einav and Scott Stern), “Bres-fest,” a celebration for Tim Bresnahan, Stanford.
- *2017*, Co-organizers (and Peter DiCola and Pam Samuelson), Research Roundtable on Economics of Mass Digitization: How to Advance More Public Access to In-Copyright Works? Searle Center on Law, Regulation and Economic Growth, Northwestern Law School.
- *2016*, Co-organizer (and Josh Lerner and Scott Stern), NBER Innovation Policy and the Economy, Washington DC.
- *2011-14*, Co-organizer, (with Peter DiCola), Research Roundtable on the Law and Economics of Digital Markets, Searle Center on Law, Regulation and Economic Growth, Northwestern Law School.
- *2014, April*, Northwestern Host, International Industrial Organization Conference.
- *2008 - 11*, Program committee, *International Industrial Organization Conference*.
- *2013, June*, Co-organizer (and Avi Goldfarb and Catherine Tucker), Economics of Digitization, Conference, Park City, Utah.
- *2012, June*, Co-organizer (and Avi Goldfarb and Catherine Tucker), Economics of Digitization, Pre-Conference, Chicago.
- *2006 – 2010*, Board member, *Telecommunications Policy Research Conference*
- *2006*, Planning committee, Workshop on Economics Systems Economics (WISE).
- *2004*, Co-organizer, (with Victor Stango), Standards and Public Policy, Chicago Federal Reserve.
- *2003*, Review Board, 5th International Conference on Electronic Commerce
- *2003*, Organizer, NBER Productivity Workshop, Computers and Telecommunications.
- *December 2000*, Organizer, Illinois Telecommunications Symposium, Kellogg Graduate School of Management, Northwestern University.
- *1999-00*, Program Committee & Chair, TPRC presents the 28th Annual Conference on "Communications, Internet and Policy."
- *2000*, Organizer and host, CCC Doctoral Student Consortia.
- *Summer 1999*, Organizer, Computer Day, NBER Summer Institute, Productivity Workshop.
- *December, 1997*, Co-organizer (with Scott Stern), NBER, University Research

Consortium, Competition and Organization in Technology-Intensive Industries, Cambridge, MA.

- *April, 1997*, Co-organizer, IGPA Regulatory Roundtable, Competition in Telecommunications and the Deregulation Bill: History, Expectations and Impact in Illinois, Union League Club, Chicago, IL.

Awards and Honors

- 2024. Keynote, Workshop on the Economics of Information Security, University of Texas at Dallas, April 8-10.
- 2024 The Case Centre's 34th global Awards and Competition: Best case in Entrepreneurship (with Sarah Gulick). *Zebra Medical Vision*.
- 2022, Keynote, The Vienna Conference on Strategy, Organizational Design and Innovation, Vienna, Austria, June 24-26.
- 2021, Keynote, National Association of Business Economists, November 3-4, "Digital Innovation and Transformation: Lessons from the Classroom."
- 2021, Industry Studies Association 2021 Ralph Gomory Best Paper Award, for "Technological Leadership (de)Concentration: Causes in Information and Communication Technology Equipment."
- 2017, "References Wars." Participant in symposium that received "Best Symposium Award" for "The Digital Frontier: How Digital Technologies Reconfigure Products, Organizations, and Fields." Academy of Management, OMT Division.
- 2017, Wyss Mentoring Award, Harvard Business School.
- 2016, Schumpeter Prize. Awarded for *How the Internet Became Commercial*.
- 2016, Master of Arts (honorary), Harvard University.
- 2015 – 18, Top Writer, Quora.
- 2015, Best Poster, 2105 Telecommunications Policy Research Conference.
- 2015, July, Keynote Speaker, ZEW Conference on the Economics of Information and Communication Technologies, Mannheim, Germany, and Torino, Italy.
- 2014, May, The Charles River Distinguished Seminar Speaker, Harvard Business School.
- 2013, Speaker, NBER China Meeting, co-hosted by the China Center for Economic Research at Peking University, and the Economics Department at Tsinghua University, Beijing, China. June.
- 2013, Keynote speaker, Workshop on Competition Policy and Regulation in Media and Telecommunications: Bridging Law and Economics, Tilburg University, the Netherlands, May 23-24.
- 2012, Best Paper Award, Workshop on Health IT and Economics, Center for Health Information and Decision Systems, University of Maryland, October 5-6.
- 2012, Plenary Speaker, Open and User Innovation, Cambridge, US, July 30-31.
- 2012, Keynote Speaker, ICT-NET conference, April, Imperial College, London, UK.
- 2012, Distinguished Public Service Award, Public Utility Research Center, University of Florida, February.
- 2011, Academic Consultant to the Federal Research Board of Governors, Network

Economics and Financial Platforms, Washington D.C., October 7, 2011.

- 2011, Keynote Speaker, Western Washington University Lecture Series. May, 2011.
- 2011, Tulluck Lecture, George Mason University, School of Law, Arlington, VA, 4/7.
- 2010, Keynote speaker, ICT Conference Munich Economic Growth, November 6, University of Munich, Munich, Germany.
- 2009, *Journal of Urban Economics*, Highly Cited Author Award, 2004-08.
- 2009, 2011, Nominated, L.G. Lavengood Outstanding Professor of the Year Award. Kellogg School of Management.
- 2006, Keynote speaker at “The Information Society in Comparative Perspectives: The Americas and Europe,” in Buenos Aires, Argentina.
- 2004, Keynote speaker at the ZEW Conference on the Economics of Information and Communication Technologies, Mannheim, Germany.
- 2003, “Best Management Paper” at the International Conference on Electronic Commerce, Pittsburgh.
- 2000, 2003, IEEE Golden Core Member
- 1999, IEEE Computer Society Meritorious Service Award
- 2003, 2000, 1999, Designated among Best Papers at Telecommunications Policy Research Conference (i.e., Top 15).
- 1991- 97, Incomplete list of Excellent Instructors, eleven times, University of Illinois.
- 1991-92, Ameritech Research Fellow, Institute for Government and Policy Analysis, University of Illinois.
- 1991-present, Who’s Who in Business and Finance.
- August 1990, Young Economists Essay Competition Award (and Garey Ramey), the European Association for Research in Industrial Economics.
- 1989, Charles Babbage Institute Dissertation Fellow.
- 1983, Phi Beta Kappa.
- 1983, High Distinction in General Scholarship, UC Berkeley.
- 1983, Departmental Honors, Department of Economics, UC Berkeley.
- 1982-83, Omicron Delta Epsilon.
- 1979-1983, California Alumni Scholar.

Grants

- 2020-2022, Catherine Tucker, co-PI, Alfred P. Sloan Foundation, “The Economics of Digitization,” National Bureau of Economic Research.
- 2017-2019, Josh Lerner and Scott Stern, co-PI, Alfred P. Sloan Foundation, “The Economics of Digitization,” National Bureau of Economic Research.
- 2016-2017, Shane Greenstein and Avi Goldfarb, co-PIs, National Science Foundation, Science of Science Policy, “Graduate Student Tutorial.” National Bureau of Economic Research.
- 2015-2016, Shane Greenstein and Avi Goldfarb, co-PIs, National Science Foundation, Science of Science Policy, “Graduate Student Tutorial.” National Bureau of Economic Research.

- 2014-2015, Shane Greenstein, PI, National Science Foundation, Science of Science Policy, "Graduate Student Tutorial and Winter Digitization Meetings," National Bureau of Economic Research.
- 2014-2016, Josh Lerner and Scott Stern, co-PI, Alfred P. Sloan Foundation, "The Economics of Digitization," National Bureau of Economic Research.
- 2010-2013, Josh Lerner and Scott Stern, co-PI, Alfred P. Sloan Foundation, "The Economics of Digitization," National Bureau of Economic Research.
- 2011, Avi Goldfarb and Chris Forman, Co-PIs, "Broadband Supply, Local Capabilities, and Broadband Adoption by Community Anchor Institutions." National Telecommunications Information Administration.
- 2007-09, Ewing Marion Kaufman Foundation, The Commercialization of Internet Infrastructure.
- 2007-08, Kristina Steffensen McElheran, Co-PI, Productivity, Supply Chain Structure and Information Technology: Endogenous Information Technology Adoption by Firms. US Census Bureau, Statistical Fellowship.
- Summer 2007, Institute for Policy Research, Summer Grant for Undergraduate Research Experience
- Summer/Fall 2007, The Searle Foundation, The Great Transition: The commercialization of the Internet.
- Summer 2006, Kellogg Teaching cases: *The Crisis at Encyclopedia Britannica and Wikipedia in the Spotlight*.
- Spring, 2004, Victor Stango, Co-PI, Standards and Public Policy, Kellogg School of Management and Federal Reserve Bank of Chicago.
- Summer 2002, Data Purchase, IT Infrastructure Investment around the United States, GM Strategy Center and Kellogg School of Management.
- Spring 2002, Michael Mazzeo, Co-PI, Competitive Local Exchange Companies, Searle Foundation.
- Spring 2000-2001, "Measuring new Industries: Internet Service Providers," Bureau of Economic Analysis, Department of Commerce, and the National Science Foundation.
- Spring 2000-2001, Jim Schwoch, co-PI, "Information Technology Measures and Benchmarks: New Approaches for International Measurements and Public Policy." National Science Foundation.
- Spring/Summer, 1999, "Measuring the Service Sector: Commercial Internet Access," Brookings Institute.
- Winter, 1999, GM Strategy Center, Northwestern University, "Developing a Price Index for Internet Access."
- Winter, 1999, Advance Technology Program, National Institute for Science and Technology, "Questions about Spillovers in the post-funding ATP Survey."
- Summer, 1998, Ameritech Grant to the Consortium for Research on Telecommunications Policy, Northwestern University, "The Organization of the Delivery of Internet Service in the US."

- *Spring, 1998*, Organization for Economic and Cooperative Development (joint with Tim Bresnahan), "The Economic Contribution of Information Technology: Value Indicators in International Perspective."
- *1997 - 98*, Council on Library Resources, "American on and off line: The Development of the Commercial Internet Service Provider Industry."
- *1996 - 97*, IGPA, University of Illinois, "The development of information infrastructure by private markets: The Distribution of Internet Service Provider Industry across the US."
- *Spring 1996*, IGPA, University of Illinois, "The Determinants of State Telecommunications Regulations."
- *Fall 1995 - 1997*, National Science Foundation (Joint with Pablo Spiller), "The Determination of Telecommunications Regulation and its Impact on Digital Infrastructure Deployment."
- *Fall 1995*, Bureau of Business and Economic Research, University of Illinois, "Telecommunications Infrastructure and Economic Welfare."
- *1995*, National Bureau of Economic Research, "An Empirical Study of the Demand for Large Scale Computing."
- *1994-1995*, University of Illinois Research Board Grant for "Modernization of the Telecommunications Infrastructure."
- *1992-1995*, National Science Foundation, Research Initiation Award, "Evaluating the Economics Benefits from Improvements in Computing Equipment," IRI-9209321.
- *1991-1992*, Institute of Government and Policy Analysis, "The Quantitative Determinants of the Computer Adoption and its Relationship to Economic Growth."
- *Fall 1991*, University of Illinois Research Board Grant for "Developing Data for an Economic History of the United States Computer Industry."
- *Fall 1990*, University of Illinois Research Board Grant for "Developing Data for an Economic History of the United States Computer Industry."
- *Fall 1989*, Center for Economic Policy Research, Stanford University, "A Market History of the Mainframe and Mini-Computer Industry in the United States."
- *1989*, National Science Foundation, Post-Doctoral Fellow in Applied Economics, at Center for Economic Policy Research, Stanford University.

Consulting Experience

- *June, 2014-April, 2015*, Special Economic Consultant to the Federal Communications Commission, Analysis of the proposed merger between Comcast and Time Warner Cable.
- *December, 2011*, Consultant to Research Institute of Economy Trade and Industry (REITI), Ministry of Economics Trade and Industry (METI), Tokyo, Japan. Issues in platforms and standardization.
- *Summer-Fall, 2009*, Conference Board, Accounting for the Contribution of Broadband to the Internet in Six Countries.
- *Winter, 2006*, Consultant for Lexecon Inc., Chicago Il., Issues in Internet governance.
- *Fall, 2002*, Bureau of Economic Analysis, Department of Commerce, The Price Index for

Internet Access.

- *Winter-Spring, 1998*, Consultant for Lexecon Inc., Chicago IL., Mergers in the Internet.
- *Winter-Spring, 1997*, OECD, Paris, France, The Economic Contribution of Information Technology.
- *November, 1993-95*, Consultant for Law and Economics Consulting Group, Emeryville, CA., Issues in the regulation of telecommunications infrastructure.

Public Testimony

- United States House of Representatives, Committee on Energy and Commerce, Subcommittee on Communications, Technology and the Internet, “House J. Res. 37, Disapproving the Rule Submitted by the Federal Communications Commission with Respect to Regulating the Internet and Broadband Industry Practices.” March 9, 2011.
- National Telecommunication Information Administration, Hearings on “Broadband Researchers’ Data Workshop,” June 3rd, 2010.
- Federal Communications Commission, Hearings on “Innovation, Investment, and the Open Internet,” January 13th, 2010.
- National Telecommunication Information Administration, Hearings on “Broadband Data Transparency,” October 30th, 2009.
- Federal Communications Commission, Hearings on “Economic Issues in Broadband Competition,” October 9th, 2009.
- Federal Communications Commission, Hearings on “Economic Growth, Job Creation, and Private Investment,” August 26th, 2009.
- NSF/OECD sponsored meeting on “Social and Economic Factors Shaping the Future of the Internet,” January 30th, 2007.
- Federal Trade Commission, Hearings on “Competition and Intellectual Property Law in the Knowledge-Based Economy,” February, 2002.

Doctoral Dissertation Committees at Harvard University

<u>Name</u>	<u>Department</u>	<u>Year Complete</u>	<u>Duties</u>
Jennifer Zou	Economics	-----	Reading member
Daphne Bearson	Strategy	-----	Reading member
Justine Boudou	TOM	-----	Reading member
Jeff Fossett	TOM	-----	Reading member
Daniel Yue	TOM	2024	Principal
Innessa Colaiacovo	Strategy	2024	Reading member
Nataliya Langburd Wright	Strategy	2023	Reading member
Ran Zhou	Bus Econ	2023	Principal
Dante Donati	Pampeu Fabra, Econ	2022	External Reader
Wilbur Chen	Accounting	2022	Reading member
Tommy Pan Fang	TOM	2022	Reading member
Sam Lite	Bus Econ	2021	Reading member
Cirrus Foroughi	Strategy	2020	Reading member
James Sappenfield	TOM	2020	Principal

Yuan (Grace) Gu	TOM	2020	Reading member
Emily Mower	HKS	2019	Reading member
Ankur Chavda	TIES (Sloan, MIT)	2019	Reading member
Yosub Jung	Finance	2019	Reading member
Do Yoon Kim	Strategy	2019	Principal
Ohchan Kwon	TOM	2019	Principal
Wendy Bradley	HEC Strategy	2018	Outside reader
Mike Teodorescu	Strategy	2018	Co-Principal
Chris Poliquin	Strategy	2018	Co-Principal
Klaus Ackerman	Monash U, Econ	2016	Outside reader
Darren Stevenson	UMich, Information	2016	Outside reader
Frank Nagle	TOM	2015	Co-Principal

Doctoral Dissertation Committees at Northwestern University

Erik Hovenkamp	Economics	2017	Reading member
Erin Klawitter	Communications	2016	Reading member
Yasin Ozcan	M&S	2015	Principal
Laurina Zhang	U of Toronto	2014	External Examiner
Bingyang Li	M&S	2014	Reading member
Min Ren	M&S	2014	Reading member
Ivan Fau Rufa	Economics, ABD	2014	Reading member
Klaus Ackermann	Monash, Economics	2014	External Reader
Jingqui Wang	Operations	2013	Reading member
Marit Hinno Saar	Economics	2013	Reading member
Justin Ng	M&S	2013	Principal
Matt Gunden	Economics, ABD	2013	Principal
Hojin Jung	Marketing	2012	Reading member
Junzhao Ma	Marketing	2011	Reading member
Jason O'Conner	Economics	2010	Reading member
Lei Wang	Marketing	2010	Reading member
John Laprise	Communications	2009	Reading member
Maxim Sytch	MORS	2009	Reading member
Kristina Steffenson	M&S	2008	Principal
Mian Dai	M&S	2008	Principal
Kirill Yurov	Info Systems, UIC	2008	Reading member
Yongbae Lee	Economics	2008	Reading member
Manish Tripathi	Marketing	2008	Reading member
Greg Stranger	M&S	2007	Principal
Viswanath Pingali	Economics	2007	Reading member
James Oldroyd	MORS	2007	Reading member
Yingshi Jin	Marketing, ABD	2007	Reading member
Allan Collar-Wexler	Economics	2006	Reading member
Doug Frank	M&S	2006	Reading member
Ambarish Chandra	Economics	2006	Reading member

Winai Wongserarat	M&S	2005	Principal
Eugene Orlov	Economics	2005	Reading member
Richard Hayes	MORS	2005	Reading member
James Snyder	Political Science	2004	Reading member
Jeff Prince	Economics	2004	Reading member
Urmi Mukherjea	M&S	2004	Reading member
Nick Kreisle	Economics	2004	Reading member
Mark Fusaro	Economics	2004	Reading member
Zsolt Mackaski	Economics	2004	Reading member
Mark Kennedy	MORS	2003	Reading member
Dave Barth	Economics	2003	Reading member
Chris Forman	M&S	2002	Principal
Avi Goldfarb	Economics	2002	Reading member
Toby Arquette	Communications	2002	Reading member
Craig Peters	Economics	2002	Reading member
Pedro Mendi	Economics	2001	Reading member
Stuart Gurrea	Economics	2001	Reading member
Oded Bizan	Economics	2001	Reading member
Karen Frazier	Communications	2001	Reading member
Olaf Rieck	Commerce, UBC	2000	External Examiner
Hiroshi Ohashi	Economics	2000	Reading member
Matthew Clemens	M&S	2000	Reading member
Cory Capps	Economics	2000	Reading member
Amy Almeida	Economics	1999	Reading member
Angelique Augereau	M&S	1999	Principal
Jorge Tarzijan	M&S	1998	Reading member

Doctoral Dissertation Committees at the University of Illinois

Walter Sosa Escudero	Economics	1997	Principal
Mercedes Lizardo	Economics	1997	Principal
Tom Gift	Economics	1997	Reading member
Vernon Richardson	Accounting	1997	Reading member
C. Federico Basanes	Economics	1996	Reading member
Tom Nonnenmacher	Economics	1996	Reading member
Mike Carnall	Economics	1996	Reading member
Susan McMaster	Economics	1995	Principal
Ken Brown	Economics	1994	Principal
Teresa Kauf	Economics	1994	Reading member
Andy Kang	Accounting	1994	Reading member
Ji-Ren Lee	Bus. Admin.	1994	Reading member
Yongjae Choi	Economics	1994	Reading member
Eduardo Luzio	Economics	1993	Reading member
Jung-Kun Lee	Economics	1990	Reading member

Supervision of Post-Doctoral Researchers, NBER

2019, Ruiqing Sam Cao
2017, Abhishek Nagaraj
2016, Daniel Gross
2015, Andrey Fradkin
2014, Imke Reimers
2013, Heekyung Hellen Kim
2012, Ben Shiller

Supervision of Independent Research, Harvard

Spring 2024, Wabantu Hlophe, MBA
2022-2023, Aidan Keenan, Undergraduate Honors thesis.
2021-2022, Chelsea Chen, Undergraduate. Honors thesis.
Winter 2020, Sarkis Agaian, MBA.
2019-2020, Angel Zhou, Undergraduate. Honors thesis.

Service to Harvard University

2022-24, Faculty advisor, Undergraduate Emerging Technology Initiative
2021, Outside Reviewer, KSG.
2021, Outside Reviewer, Engineering.

Service to Harvard Business School

2018-present, Personnel Committee, Ad-hoc committees
2016 - 2020, Research Coach, Junior faculty seminar
2016-present, Alumni Webinar, various times.

Faculty Sponsor, visitors to Harvard Business School

2022, Sam Ransbotham
2019, Gerald Kane
2017, Laura Gee,
2017, 2018, Roberto Fontana
2016, Ben Shiller

Executive Education

2022, 2023, 2024. Harvard Graduate School of Design, Real Estate

Supervision of Independent Research, Northwestern

Spring, 2013, Soheil Ghili, PhD.
Fall, Winter, 2011-2012. Charles Ha, Undergraduate. MMSS, Law & Economics, honors thesis.
Fall 2011, Jason Deck, TMP.
Summer, 2011, John Osborne, TMP.
Winter, Spring 2011, Benjamin Rothschild, Undergraduate, Economics, honors thesis.
Spring, 2010, Jordi Higuera, MBA.
Fall, Winter, Spring, 2010, Yasin Ozcan, PhD. Justin Ng., PhD.

Fall, 2010. Daniel Belcher, MBA.
Winter, Spring, 2009, Roxanne Luk, Undergraduate, Economics, honors thesis.
Winter, Spring, Fall, 2009, Yasin Ozcan, PhD.
Summer 2008, David Aronson, TMP.
Winter, Spring, 2008. Guy Arie, PhD.
Spring 2007, James Jacobsen, TMP.
Winter 2006, Mian Dai, MECS PhD candidate, Juliana Norbriega, MECS Masters candidate.
Summer 2005, Lisa Sato, Deepa Moorthy, MBA.
Winter 2004 – Winter 2005, Yingshi Jin, Marketing Department PhD candidate.
Spring 2005, John Laprise, Communications Department PhD candidate.
Winter 2004, Daniel Baranowski, Patrick Youssi, MBA.
Winter, 2004, James Oldroyd, MORS Department.
Fall, Winter & Spring, 2004, Winai Wongersurat, M&S Department.
Winter, Spring 2002, Kurt Vonnahme, Undergraduate economics, Honors thesis.
Fall 2000, Zeev Klein, Undergraduate, Economics, honors thesis.
Spring 2000, Herb Munsterman, Biotech program, Alexandre Alvim, MBA,
Robert King, MBA, Toby Arquette, Communications, Greg Young, Biotech Program,
Winter 2000, Jaideep Vishnubhakat, Biotech Program, Pablo Prieto, Biotech Program,
Spring 1999, Luciana Cordova, Laura Farrelly, Ned Smith, MBA, James DeMarco, Chris
Stengrim, MBA,
Winter 1999, Sharon Goldstein, Robert Seirens, Andy Pinkerton, Nathan, Swaminathan, MBA,
Fall 1998, Eric Berg, MBA,
Spring 1998, Kathleen Iirate, EMP,
Winter, 1998, Ned Rollhaus, MBA

Service to the Northwestern University

2002, 2004, 2011, Outside Reviewer, Law School P&T ad hoc committee.
2000-05, Oversight board, IT program.
1999-00, Oversight Board, Biotechnology Program
1997-99, Intellectual Property Policy Committee
1999 - 2003. Outside reviewer, Communications Department recruiting.

Service to the Kellogg Graduate School

2008-2010, 2013, (*ad hoc*), 2014, (*ad hoc*), Personnel Committee.
2006-2008, Student Affairs Committee
2005-2006, Stanley Reiter Award committee.
2001- 2005, 2011 Research Computing Committee
2001, 2002, Ad hoc curriculum review.
1999, 2000, 2001, 2005, 2007, 2010, 2011, 2012 Ad hoc personnel review committees.
1997-98, 2000-01, 2010-12 Information Technology Committee.

Executive Education

Part of M&S program: 2001-2009.
Half courses for Recanati, Tel-Aviv, 2002 - 2004.

Service to the Management and Strategy Department

2002-2005, Department Chair.
2000- 2002, Graduate Program co-coordinator.
2012, 2008, 1998-99, Junior Recruiting Committee
1997-98, 99-00 Recruiting Committee
2006-2013, Ad hoc department promotion committees.

Independent Study Students at the University of Illinois

1997, Paul Nash, Engineering
1997, Ed Jimenez, Business Administration
1996, Oliver Biege, Business Administration
1996, Steven Wu, Engineering and Economics
1995-96, J Gregory Parrish, Business Administration
1993, Howard Dick, Economics-Political Science
1993, Ian McPherson, Economics

Service to the Department at the University of Illinois

1996-97, Faculty Advisory Committee
1996-97, Faculty Development Committee
1996-97, Graduate Programs Committee
1996-97, Planning Committee
1996-97, Kinkead Recruiting Committee
1993-94, Steering Committee.
1990-91, 1992-93, 1996, Undergraduate Studies Committee.
1991-92, 1993, 1993-94, 1995-96, 1996-97, Coordinator, Industrial Organization/Ameritech
Regulation Workshop.

Service to the College at the University of Illinois

1997, College of Commerce Cyberfest Presentation Organizer.
1996-97, Executive Education Committee. 1992-93,
1993-94, Affirmative Action Committee.

Service to University of Illinois

1995-97, Partnership Illinois -- Technology Transfer Sector
1995-96, Faculty Friend, Wardall Hall.
1994-97, Campus Honors Faculty
1992-93, Faculty Friend, Allen Hall North 2.

Service to Professional Community: Outside Review of Programs

2016, MIT Sloan TIES Phd Program.
2019, Carnegie-Mellon University, Heinz School of Information and Public Policy.

Service to Professional Community: Outside Review and Promotion

Boston College, Boston University, Brandies University, Cambridge University, Carnegie-Mellon University, Cheung Kong Graduate School of Business, City College of New York, Columbia University, Cornell University, Duke University, Ecole Polytechnique Fédérale de Lausanne (EPFL), European School of Management and Technology, George Mason University, Georgetown University, Georgia Technology University, Harvard University, IDC – Herzliya, IE Business School, Imperial College London, Kansas State University, Katholieke Universiteit Leuven, London Business School, MacArthur Foundation, Massachusetts Institute of Technology, Melbourne Business School, Monash University, National Bureau of Economic Research, New York University, Northeastern University, Notre Dame, Occidental College, Oxford University, Penn State University, Pomona College, Purdue University, Rensselaer Polytechnic Institute, Royal Swedish Academy of Science, San Jose State University, Stanford University, SUNY – Queens College, SUNY – Stony Brook, Syracuse University, Tel Aviv University, Temple University, Texas A&M University, Tufts University, Universidad de Navarra, Université’ of Lausanne, University of Arizona, University of British Columbia, University of Calgary, University of California – Berkeley, University of California – Davis, University of California – Irvine, University of California – Los Angeles, University of California – Santa Cruz, University of California – San Diego, University of Central Florida, University of Colorado - Boulder, University of Georgia, University of Illinois – Urbana/Champaign, University of Indiana – Bloomington, University of Kansas, University of Maryland, University of Michigan, University of Minnesota, University of Navarra, University of Nevada – Las Vegas, University of North Carolina – Chapel Hill, University of North Texas, University of Pennsylvania, University of Pittsburgh, University of Santa Clara, University of Southern California, University of Texas – Arlington, University of Texas – Austin, University of Toronto, University of Utah, University of Virginia, University of Wisconsin -- Madison, University of Wisconsin – Milwaukee, University of Zurich, Washington University – St. Louis, Wesleyan University, Yale University.

Service to Professional Community: Requests to Referee and Review

Academic Press, Academy of Management, Association for Computing Machinery (ACM) Books, ACM Transactions on Internet Technology, American Economics Review, American Economic Review Insights, Annals of the History of Computing, B.E. Journal of Economic Analysis and Policy, Brookings Institute, Bulletin of Economic Research, California Management Review, Canadian Journal of Economics, Econometrica, Economics of Innovation and New Technology, Economic Inquiry, Economics Letters, Economic Journal, Economie et Statistique, Education Finance and Policy, European Journal of Political Economy, European Research Council, European and Social Research Council, European Journal of Standardization, Explorations in Economic History, Federal Communications Commission, Federal Trade Commission, Finnish Academy of Sciences, Ford Foundation, Fulbright Awards, Government Accounting Office, Harper-Collins Press, IEEE, IEEE Micro, Industrial and Corporate Change, Industrial and Labor Relations Review, Information and Culture: A Journal of History, Interfaces, International Journal of Industrial Organization, International Journal of Innovation Management, International Journal of Technology Management, Israel Science Foundation, Journal of Behavior and Economics, Journal of Business, Journal of Corporate Finance, Journal of Econometrics, Journal of Economic Behavior and Organization, Journal of Economic

Geography, Journal of Economic Growth, Journal of Economic History, Journal of Economics Dynamics and Control, Journal of Economics and Management Strategy, Journal of Environmental Economics and Management, Journal of Evolutionary Economics, Journal of Industrial Economics, Journal of International Economics, Journal of Law and Economics, Journal of Law Economics and Organization, Journal of Political Economy, Journal of Public Economics, Journal of Urban Economics, Management Science, Managerial and Decision Economics, Law and Society Review, Marketing Science, Marshall Fund, MIT Press, National Academy of Engineering, National Research Council of the National Academy of Sciences, National Science Foundation, National Tax Journal, Netherlands Organization for Scientific Research, New York Census Research Data Center, NYUAD Research Enhancement Fund, Plos One, Public Policy Institute of California, Quarterly Journal of Business and Economics, Quarterly Journal of Economics, Quarterly Journal of Economics and Finance, Rand Journal of Economics, Regional Studies, Research Policy, Research in International Business and Finance, Review of Economics and Statistics, Review of Economic Studies, Review of Income and Wealth, Review of Network Economics, Rhodes Fund, Russell Sage Foundation, Science Magazine, Scientometric, Sloan Foundation, Socio-Economic Planning Sciences, Social Science Research Council, Social Science and Humanities Research Council of Canada, Southern Economic Journal, Stanford University Press, Strategic Management Journal, The Information Society, Technological Forecasting and Social Change, Telecommunications Policy, United States Israel Binational Science, Foundation, University of Illinois Research Board, World Scientific Publishing.

Selected Media Appearances and Interviews

Print media: ABA Journal, Agency France Press, Bloomberg News, Boston Globe, Business Week, Chicago Tribune, Chicago Sun Times, Communications Daily, Computer World, Consumer Electronics, Crane's Chicago Business, Denver Post Editor & Publishing Magazine, Dow Jones Magazine, Fast Company, Financial Times, Forbes, Freedom Forum On Line, Harper's Magazine, Harvard Magazine, Harvard Gazette, International Herald Tribune, Los Angeles Times, New Orleans Times-Picayune, New York Review of Books, New York Post, New York Times, PC World, Reuters, San Jose Mercury News, Technology Review, The Economist, Time Magazine, Toronto Star, USA Today, US News and World Report, Wall Street Journal, Washington Post, Washington Times, Wired, World Business.

Internet Media: Bloomberg news, CNET News, Communications Daily, DSL Prime, Forbes ASAP, Freakeconomics Blog, Free Exchange, Law360, MarketPlace Tech Report (American Public Media), Newsle.com, PC World, Politico Pro, Radio for Change.com, Reuters, Slashdot.org, Tele.com, The Daily Dot, ZDNET news, Wired.com.

Radio appearances: CNET Radio news, MarketPlace, Missouri Public Radio, NBC Radio news, NPR *Morning Edition* and *All Things Considered*, Market Place, Planet Money, WAMU *The Kojo Nnamdi Show*, WBEZ, Chicago Public Radio, *Odyssey with Gretchen Helfrich*, *Gabriel Spitzer*, WGN, Chicago, *Bob Collins Show*, *Spike O'Dell Show*, Ext780, with *Milton Rosenberg*, WDCB, Chicago, WBBM Radio news, Chicago, WWL New Orleans,

The Tommy Tucker Show, Wall Street Journal Radio – New York, XM/Sirius – Kartik Hosanagar, [*The Digital Show*](#).

Local television appearances: In Chicago: CBS local news, Fox local news, CLTV local news, WGN *Nightly News*, WTTW *Chicago tonight*. In Urbana: WILL, Channel 12, Urbana, IL., *Talking Point*.

Selected Examples of Media Featuring Quotes and Research:

- By Jackie Davalos, “Microsoft’s Bing Market Share Barely Budged over ChatGPT Add-On,” <https://www.bnnbloomberg.ca/microsoft-s-bing-market-share-barely-budged-with-chatgpt-add-on-1.2023518>, Bloomberg News. January 18, 2024.
- By Christina Pazzanese, “So What Exactly is Google Accused of?” *Harvard Gazette*, September 14, 2023, <https://news.harvard.edu/gazette/story/2023/09/breaking-down-google-antitrust-case/>.
- By Steve Lohr, “Whatever Happened to IBM’s Watson?” <https://www.nytimes.com/2021/07/16/technology/what-happened-ibm-watson.html?smid=em-share>, *New York Times*, July 16, 2021.
- By Tim De Chant, “Bad Mergers and non-compete clauses targeted in Biden executive order.” <https://arstechnica.com/tech-policy/2021/07/biden-seeks-trustbuster-status-in-push-to-unwind-bad-mergers/>, *Arstechnica*, July 9, 2021.
- By Tim De Chant, “Lina Kahn, Big Tech Skeptic, named FTC chair mere hours after confirmation,” <https://arstechnica.com/tech-policy/2021/06/formidable-amazon-critic-lina-khan-named-ftc-chair-putting-big-tech-on-notice/> *Arstechnica*, June 16, 2021.
- By Jim Tankersley and Jeanna Smialek, “Biden’s Plan Spurs Fight over What Infrastructure Really Means.” <https://www.nytimes.com/2021/04/05/business/economy/biden-infrastructure.html>, *New York Times*, April 6, 2021.
- “Wikipedia at 20: The Other Tech Giant.” *The Economist*. <https://www.economist.com/international/2021/01/09/wikipedia-is-20-and-its-reputation-has-never-been-higher> Jan 9, 2021.
- “Google’s founders have vanished as the company goes to war with Washington. Its yet another mess for Sundar Pichai to clean up.” *Business Insider*. <https://www.businessinsider.com/larry-page-sergey-brin-smartest-move-a-perfectly-timed-disappearance-2020-10>. Oct 25, 2020.
- By Matt Thompson and Todd Buell, “Pandemic Vexes Debate on Digital Taxes, Unprofitable CoS,” *Law360*, <https://www.law360.com/publicpolicy/articles/1267226>
- Keith Griffith, “Google co-founder Larry Page was ‘fed up’ with entitled engineers, tried to get replaced as CEO for years because he hated mundane corporate tasks, and hadn’t spoken in public for three years when he stepped down,” *The Daily Mail*, 5 December 2019, <https://www.dailymail.co.uk/news/article-7759983/Google-founder-Larry-Page-hadnt-spoken-public-three-years-stepped-down.html>
- By Jack Nicas, Conor Dougherty and Daisuke Wakabayashi, “How Google’s Founders Slowly Stepped Away From Their Company,” *New York Times*, December 4, 2019, <https://www.nytimes.com/2019/12/04/technology/google-larry-page-sergey-br.html>.
- Sheryl Tian Tong Lee, “China Races Ahead of the US in the Battle for 5G Supremacy,” *Bloomberg News*, August 1, 2019. <https://www.bloomberg.com/news/articles/2019-08-01/china-bets-on-5g-socialism-in-push-to-lead-global-tech-race>
- Steven Nelsen, Showdown looms as states resurrect net neutrality rules, *Washington Examiner*, <https://www.washingtonexaminer.com/policy/technology/showdown-looms-as-states-resurrect-net-neutrality-rules>, Sept 25, 2018.
- Joe Williams, How media mega-mergers may jack up your TV bill, even with cord cutting, <https://www.washingtonexaminer.com/business/how-media-mega-mergers-may-jack-up-your-tv->

- [bill-even-with-cord-cutting](#), June 26, 2018.
- J M Porup, Another Massive DDOS Internet Blackout Could be Coming Your Way, <https://www.csoonline.com/article/3258545/cyber-attacks-espionage/another-massive-ddos-internet-blackout-could-be-coming-your-way.html>, Feb 28, 2018.
- Stacey Vanek Smith, Forget Neutrality, NPR, Planet Money, December 15, 2017. <https://www.npr.org/templates/transcript/transcript.php?storyId=571176019>.
- Hickey, Alex, Net Neutrality vs Internet Freedom: A case for the Status Quo, CIO Dive, 12,13,2017, <https://www.ciodive.com/news/net-neutrality-vs-internet-freedom-a-case-for-the-status-quo/512929/>.
- Alexis Madrigal, Silicon Valley's Big Three vs. Detroit's Golden-Age Big Three, The Atlantic, <https://www.theatlantic.com/technology/archive/2017/05/silicon-valley-big-three/527838/>, May 24, 2017.
- Ananya Bhattacharya, Quartz.com, Wikipedia is not as Biased as you Might Think, <http://qz.com/820251/wikipedias-best-articles-are-as-neutral-as-the-encyclopedia-britannica-researchers-have-found/>. 11/6/2016.
- Jeff Guo, Washington Post, <https://www.washingtonpost.com/news/wonk/wp/2016/10/25/somethings-terribly-wrong-with-the-internet-and-wikipedia-might-be-able-to-fix-it/>, Wikipedia is fixing one of the Internet's biggest flaws. 10/25/2016.
- Larry Downes, Washington Post, <https://www.washingtonpost.com/news/innovations/wp/2016/10/24/google-and-facebook-contribute-zero-economic-value-thats-a-big-problem-for-trade/>, Google and Facebook Contribute Zero Economic Value. That's a big Problem for Trade. Oct 24, 2016.
- Robert Gebelhoff, Washington Post, https://www.washingtonpost.com/news/in-theory/wp/2016/10/19/science-shows-wikipedia-is-the-best-part-of-the-internet/?utm_term=.a5daa3d53dcf, "Science Shows Wikipedia is the Best Part of the Internet." October 19, 2016.
- Julia Hanna, Forbes Magazine, We spend a fixed amount of time online each. <https://www.forbes.com/sites/hbsworkingknowledge/2016/09/14/we-spend-a-fixed-amount-of-time-online-each-week-but-people-with-higher-incomes-spend-less/?sh=36906792bf83>, September 14, 2016.
- Tyler Cowen, Marginal Revolution, "Let them Eat Internet." <https://marginalrevolution.com/marginalrevolution/2016/07/let-them-eat-internet.html>, July 2016.
- Drake Baer, New York Magazine, <http://nymag.com/scienceofus/2016/07/more-money-less-internet.html>, "The more money you make, the less time you spend online." July 20, 2016.
- Myles Udland, Business Insider, <http://www.businessinsider.com/internet-habits-are-bad-news-for-digital-media-2016-7>, "Consumers have a troubling internet habit that is threatening digital media, July 19, 2016.
- Allee Manning, Vocativ, <http://www.vocativ.com/342037/richer-people-spend-less-time-on-the-internet/>, "Richer people spend less time on the internet." July 19, 2016
- Christina Pazzanese, Harvard Gazette, http://news.harvard.edu/gazette/story/2016/05/creative-differences/?utm_medium=social&utm_campaign=hks-twitter&utm_source=twitter, June, 2016.

Reviews of "How the Internet Became Commercial"

- <http://reason.com/archives/2016/06/11/how-privatization-and-competition-freed>, How Privatization and Competition Freed the Web and Made the Modern World Possible, Reason.com, Free minds and free markets. June 11, 2016. By Milton Mueller.
- Walter Frick, <https://hbr.org/2016/06/who-controls-the-internet>, Who Controls the Internet, *Harvard Business Review*, June, 2016.
- <http://ijoc.org/index.php/ijoc/article/view/5431/1606>, International Journal of Communication 10(2016), Book Review 1552–1554. By Jonathan Aronson.

- http://www.philly.com/philly/entertainment/20160221_How_Internet_Became_Commercial_Enlightened_competition_-_and_regulation.html, Philadelphia Inquirer, February 22, 2016.
- <http://dailyorange.com/2016/02/what-a-harvard-business-professor-said-about-the-internet-during-a-lecture-at-su/> The Daily Orange, 2/16/16, by Kathryn Krawczyk.
- <https://www.foreignaffairs.com/reviews/capsule-review/2016-02-16/how-internet-became-commercial-innovation-privatization-and-birth>, March/April Issue, *Foreign Affairs*, Reviewed by Richard N. Cooper.
- <http://www.economicprincipals.com/>, Will “innovation from the edge” help with global warming? 11/29. David Warsh.
- <http://www.wsj.com/articles/privatizing-the-superhighway-1448325429>, Wall Street Journal.
- <http://www.bizedmagazine.com/archives/2015/6/research/books/>
- <http://marginalrevolution.com/marginalrevolution/2015/10/how-the-internet-became-commercial.html>, By Tyler Cowen
- <https://www.kirkusreviews.com/book-reviews/shane-greenstein/how-the-internet-became-commercial/>, Kirkus.

More Selected Examples of Media Featuring Quotes and Research:

- Richard Florida, “San Francisco’s Increasing Dominance over US Innovation.” <http://www.citylab.com/tech/2016/05/san-franciscos-increasing-dominance-over-us-innovation/484199/>, The Atlantic, CityLab, May 25, 2015.
- The Native Society, <http://thenativesociety.com/nativeadmission/2016/1/23/shane-greenstein-author-mba-class-of-1957-professor-of-busin.html>, January 23, 2016.
- Adrienne LaFrance, “When will the Internet be cheaper?” The Atlantic, <http://www.theatlantic.com/technology/archive/2015/09/when-will-internet-fees-go-the-way-of-long-distance-phone-calls/405235/> September 14, 2015.
- Tim Aepfel, “50 Million Users: The Making of an Angry Internet Meme,” Wall Street Journal, Real Time Economics, <http://blogs.wsj.com/economics/2015/03/20/50-million-users-the-making-of-an-angry-birds-internet-meme/>.
- The Economist, “Pardon the Disruption, When firms succumb to new forms of competition, inflexible organization is usually to blame,” <http://www.economist.com/news/finance-and-economics/21615587-when-firms-succumb-new-forms-competition-inflexible-organisation-usually>, September 4, 2014. Free Exchange, page 78.
- Sean Silverthorne, Forbes, “Scholars Crowd up to Study Wisdom of the Crowds,” <http://www.forbes.com/sites/hbsworkingknowledge/2014/07/31/scholars-crowd-up-to-study-wisdom-of-crowds/>, July, 30, 2014
- Peter Marsh, Financial Times, “[The world struggles to keep up with the pace of change in science and technology](http://www.ft.com/content/06181414-1000-11e4-b03a-00144feabdc0),” June 18, 2014.
- Zoe Chace, Jacob Goldstein, National Public Radio, Planet Money, April 4, 2014, “The Last Mile,” <http://www.npr.org/player/v2/mediaPlayer.html?action=1&t=1&islist=false&id=299060527&m=299231431> .
- Zoe Chace, National Public Radio, Planet Money, March 27, 2014, “Netflix hit Spurs Talks over who pays for Internet Service Upgrades,” <http://www.npr.org/2014/03/27/295144689/netflix-hit-spurs-talks-over-who-pay-for-internet-service-upgrades>
- The Washington Times, October 21, 2013, “Click Capitalism: PR firms cash in cleaning up client’s Wikipedia pages,” by Shaun Waterman. <http://www.washingtontimes.com/news/2013/oct/21/money-to-pr-firm-can-buy-good-image-on-wikipedia/>
- The New York Times, August 18, 2013, “Is Big Data an Economic Big Dud?” By James Glanz, http://www.nytimes.com/2013/08/18/sunday-review/is-big-data-an-economic-big-dud.html?pagewanted=1&_r=0&hp.

- Communications Daily, July 10, 2013, “Members of FCC’s Open Internet Advisory Committee Question Role They Were Assigned by Agency,” <http://www.warren-news.com/telecomservices.htm>.
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