EXHIBIT A

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Curriculum Vitae

Michael D. Smith

ADDRESS

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ACADEMIC POSITIONS

2018-Present **Carnegie Mellon University** **Pittsburgh, PA**
J. Erik Jonsson Professor of Information Technology and Public Policy
Co-Director, Initiative for Digital Entertainment Analytics (IDEA)
Co-Director, Initiative for Teaching and Education Analytics (iTEA)
Heinz College of Information Systems and Public Policy

2011-2018 **Carnegie Mellon University** **Pittsburgh, PA**
Professor of Information Technology and Marketing
Co-Director, Initiative for Digital Entertainment Analytics (IDEA)
Heinz College of Information Systems and Public Policy

2009-2011 **Carnegie Mellon University** **Pittsburgh, PA**
Associate Professor of Information Technology and Marketing
Heinz College of Information Systems and Public Policy

Summer 2010 **London Business School** **London, UK**
Visiting Associate Professor of Management Science and Operations

2006-2009 **Carnegie Mellon University** **Pittsburgh, PA**
Dean's Career Development Chair,
Associate Professor of Information Technology and Marketing
Heinz College of Information Systems and Public Policy

2000-2006 **Carnegie Mellon University** **Pittsburgh, PA**
Assistant Professor of Information Technology and Marketing
H. John Heinz III School of Public Policy and Management

EDUCATION

1996-2000 **MIT Sloan School of Management** **Cambridge, MA**
Ph.D. in Management Science and Information Technology
Dissertation Title: Essays on Structure and Competition in Electronic Markets
Dissertation Committee: Erik Brynjolfsson (Chair), John D.C. Little, Thomas Malone

1993-1996 **University of Mafryland at College Park** **College Park, MD**

Master of Science in Telecommunications

Thesis Title: An Analysis of Internet Architecture and Services
Thesis Advisor: Curt Grimm

1986-1991 **University of Maryland at College Park** **College Park, MD**

Bachelor of Science in Electrical Engineering, Graduating Summa Cum Laude

Valedictorian and Commencement Speaker, College of Engineering

Spirit of Maryland Award, given by the University of Maryland to the most outstanding graduating senior on the basis of scholarship, leadership, and citizenship

Omicron Delta Kappa Leadership Honor Society Province I Leader of the Year, voted most outstanding student leader among the 24 colleges and universities in ODK Province I

INDUSTRY POSITIONS

1995-1996 **Booz·Allen & Hamilton** **McLean, VA**

Senior Consultant, Telecommunications Client Service Team
Evaluated voice, video, and data communication needs for clients. Performed laboratory experiments using various LAN/WAN technologies for client.

1993-1995 **GTE Systems Corporation** **Rockville, MD**

Member Technical Staff, Advanced Telecommunications Systems Group
Lead technical member of a team assisting in the development of new cellular fraud management products for GTE. Lead knowledge engineer for Telecommunications Network Modeling System.

1991-1993 **GTE Service Corporation** **Stamford, CT**

Engineering Associate Development Program
Completed management training program for GTE's top 20 engineering recruits. Program consisted of three assignments in different components of GTE Corporation:

- *Network Applications Specialist, GTE Northwest Telephone Operations.* Conducted strategic marketing analysis of selected major accounts in GTE's Northwest sales region.
- *Product Specialist, Digital Television System, GTE Spacenet, McLean, Virginia.* Assisted in product management of digital satellite television system.
- *Research Engineer, GTE Laboratories, Waltham, Massachusetts.* Performed experiments using Artificial Intelligence to dynamically allocate wireless communication channels.

TEACHING

95-422 – Managing Digital Transformation, CMU Heinz College, Undergraduate Information Systems Program, Fall 2023-Present.

94-732 – Managing Disruption in Media and Entertainment, CMU Heinz College, Master of Entertainment Industry Management Program, Spring 2021-Present.

95-722 – Digital Transformation, CMU Master of Information Systems Management Program, Fall 2005-Fall 2022. (Teaching Excellence Award, 2009)

95-732 – Marketing Digital Media, CMU Heinz College, Master of Entertainment Industry Management Program, Master of Entertainment Industry Management Program, Spring 2015-2020.

95-732 – Interactive Marketing: Technology in the Marketing Mix, CMU Master of Information Systems Management Program, Spring 2001-2014. (Teaching Excellence Award, 2004)

70-488 – Internet Marketing, CMU Graduate School of Industrial Administration, Spring 2001-Spring 2015. (Outstanding Faculty Award, CMU Chapter, National Society of Collegiate Scholars, 2002.)

95-849 – Advanced Topics in Interactive Marketing, CMU Master of Information Systems Management Program, Fall 2005-Spring 2007.

90-914 – Ph.D. Seminar: Analyzing and Designing Efficient Electronic Markets, Fall 2004.

95-730 – Electronic Commerce, CMU Master of Information Systems Management Program, Spring 2001-04.

90-712 – Public Policy Issues: Electronic Commerce, Spring 2003 (Co-Taught with Karen Clay).

BMIS 3022 – Economics and Information Systems, PhD Seminar, University of Pittsburgh Katz School of Business, Spring 2003 (Co-Taught with Chris Kemerer).

45-821 – Internet Marketing, MBA Program, CMU Graduate School of Industrial Administration, Spring 2002 (Co-Taught with Alan Montgomery).

REFEREED JOURNAL ARTICLES

1. Hughes, Justin, Michael D. Smith. 2024. Do Copyright Professors Pay Attention to Economists?: How Empirical Evidence on Copyright Piracy Appears (or Not) in Law Literature. *Columbia Journal of Law and the Arts*, **47**, 165.
2. Van Alstyne, Marshall, Michael D. Smith, Herbert Lin. 2023. Improving Section 230, Preserving Democracy, and Protecting Free Speech. *Communications of the Association of Computing Machinery*, April, **66**(4), 26-28.
3. Manzoor, Emaad, George Chen, Dokyun Lee, Michael D. Smith. 2023. Influence via Ethos: On the Persuasive Power of Reputation in Deliberation Online. *Management Science*. Forthcoming. (Articles in Advance: https://pubsonline.informs.org/doi/epdf/10.1287/mnsc.2023.4762)
4. Zeng, Helen (Shuxuan), Brett Danaher, Michael D. Smith. 2023. Internet Governance Through Site Shutdowns: The Impact of Shutting Down Two Major Commercial Sex Advertising Sites. *Management Science*. Forthcoming. (Articles in Advance: https://pubsonline.informs.org/doi/10.1287/mnsc.2022.4498)
5. Jaeung Sim, Daegon Cho, Michael D. Smith. 2022. Bestseller Lists and Product Discovery in the Subscription-based Market: Evidence from Music Streaming. *Journal of Economic Behavior and Organization*. **194**, 550-567.
6. Zhou, Mi, George Chen, Pedro Ferreira, Michael Smith. 2021. Consumer Behavior in the Online Classroom: Using Video Analytics and Machine Learning to Understand the Consumption of Video Courseware. *Journal of Marketing Research*. **58**(6) 1079-1100.
7. Ananthakrishnan, Uttara, Beibei Li, Michael D. Smith. 2020. A Tangled Web: The Impact of Displaying Fraudulent Reviews on Product Search Engines. *Information Systems Research*. **31**(3) 950-971.
8. Danaher, Brett, Jonathan Hersh, Michael D. Smith, Rahul Telang. 2020. The Effect of Piracy Website Blocking on Consumer Behavior. *Management Information Systems Quarterly*. **44**(2) 631-659.
9. Sivan, Liron, Michael D. Smith, Rahul Telang. 2019. Do Search Engines Influence Media Piracy? Evidence from a Randomized Field Study. *Management Information Systems Quarterly*. **43**(4) 1143-1154.
10. Chen, Hailiang, Yu Hu, Michael D. Smith. 2019. The Impact of E-book Distribution on Print Sales: Analysis of a Natural Experiment. *Management Science*. **65**(1) 19-31.
11. Smith, Michael D., Rahul Telang, Yi Zhang. 2019. I Want You Back: An Empirical Analysis of the Interplay Between Legal Availability and Movie Piracy, *International Journal of the Economics of Business*. **26**(1) 199-216.
12. de Matos, Miguel Godinho, Pedro Ferriera, Michael D. Smith. 2018. The Effect of Subscription Video-On-Demand on Piracy: Evidence from a Household Level Randomized Experiment. *Management Science*. **64**(12) 5610-5630.
13. Cho, Daegon, Michael D. Smith, Rahul Telang. 2017. An Empirical Analysis of Frequency and Location of Concerts in the Digital Age. *Information Economics and Policy*. 40, 41-47.

14. Danaher, Brett, Michael D. Smith. 2017. Digital Piracy, Film Quality, and Social Welfare. *George Mason University Law Review*. **24**(4:Summer) 923-938.

15. Stephens-Davidowitz, Seth, Hal Varian, Michael D. Smith. 2017. Super Returns? The Effects of Ads on Product Demand. *Quantitative Marketing and Economics*, **15**(1), 1-28.
(2018 Dick Wittink Award for the best paper published in *Quantitative Marketing and Economics*)

16. Danaher, Brett, Michael D. Smith, Rahul Telang. 2017. Copyright Enforcement in the Digital Age: Empirical Evidence and Conclusions. *Communications of the Association of Computing Machinery*. **60**(2) 68-75.

17. Daegon Cho, Michael D. Smith, Alejandro Zentner. 2016. Internet Adoption and the Survival of Print Newspapers: A Country-Level Examination. *Information Economics and Policy*. 37, 13-19.

18. Godinho de Matos, Miguel, Pedro Ferreira, Michael D. Smith, Rahul Telang. 2016. Culling the herd: Using real world randomized experiments to measure social bias with known costly goods. *Management Science*. **62**(9) 2563-2580.

19. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2015. Do Organic Results Help or Hurt Sponsored Search Performance? *Information Systems Research.* **26**(4) 695-713.

20. Gong, Jing, Michael D. Smith, Rahul Telang. 2015. Substitution or Promotion? The Impact of Price Discounts on Cross-Channel Sales of Digital Movies. *Journal of Retailing*. **91**(2) 343-357.

21. Danaher, Brett, Yan Huang, Michael D. Smith, Rahul Telang. 2015. An Empirical Analysis of Digital Music Bundling Strategies. *Management Science*, Special Issue on Business Analytics, **60**(6) 1413-1433.

22. Ma, Liye, Alan Montgomery, Param Singh, Michael D. Smith. 2014. An Empirical Analysis of the Impact of Pre-Release Movie Piracy on Box Office Revenue. *Information Systems Research*. **25**(3) 590-603.

23. Kumar, Anuj, Michael D. Smith, Rahul Telang. 2014. Information Discovery and the Long Tail of Motion Picture Content. *Management Information Systems Quarterly*. **38**(4) 1057-1078.

24. Danaher, Brett, Michael D. Smith, Rahul Telang, Siwen Chen. 2014. The Effect of Graduated Response Anti-Piracy Laws on Music Sales: Evidence from an Event Study in France. *Journal of Industrial Economics*. **62**(3) 541-553.

25. Danaher, Brett, Michael D. Smith. 2014. Gone in 60 Seconds: The Impact of the Megaupload Shutdown on Movie Sales. *International Journal of Industrial Organization*. **33** 1-8.

26. Zentner, Alejandro, Michael D. Smith, Cuneyd Kaya. 2013. How Video Rental Patterns Change as Consumers Move Online. *Management Science*. **59**(11) 2622-2634.

27. Kemerer, Chris F., Charles Z. Liu, Michael D. Smith. 2013. Strategies for Tomorrow's 'Winners-Take-Some' Digital Goods Markets. *Communications of the Association of Computing Machinery*. **56**(5) 76-82.

28. Liu, Charles, Chris Kemerer, Sandra Slaughter, Michael D. Smith. 2012. Standards Competition in the Presence of Digital Conversion Technology: An Empirical Analysis of the Flash Memory Card Market. *Management Information Systems Quarterly*, **36**(3) 921-942.

29. Garg, Rajiv, Michael D. Smith, Rahul Telang. 2011. Measuring Information Diffusion in an Online Community. *Journal of Management Information Systems*, **28**(2) 11-37.

30. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2011. Location, Location, Location: An Analysis of Profitability and Position in Online Advertising Markets. *Journal of Marketing Research*, **48** 1057-1073.

31. Liu, Charles, Esther Gal-Or, Chris Kemerer, Michael D. Smith. 2011. Compatibility and Proprietary Standards: The Impact of Conversion Technologies in IT-Markets with Network Effects. *Information Systems Research*, **22**(1) 188-207.

32. Brynjolfsson, Erik, Yu Hu, Michael D. Smith. 2010. Long Tails and Superstars: The Effect of IT on Product Variety and Sales Concentration Patterns. *Information Systems Research* 20th Anniversary Special Issue, **21**(4) 736-747.

33. Danaher, Brett, Samita Dhanasobhon, Michael D. Smith, Rahul Telang. 2010. Converting Pirates without Cannibalizing Purchasers: The Impact of Digital Distribution on Physical Sales and Internet Piracy. *Marketing Science*, **29**(6) 1138-1151.

34. Smith, Michael D., Rahul Telang. 2010. Piracy or Promotion? The Impact of Broadband Internet Penetration on DVD Sales. *Information Economics and Policy*, Special Issue on the Economics of Digital Piracy, **21** 289-298.

35. Tang, Zhulei, Alan Montgomery, Michael D. Smith. 2010. The Impact of Shopbot Use on Prices and Price Dispersion: Evidence from Online Book Retailing. *International Journal of Industrial Organization*, **28** 579-590.

36. Brynjolfsson, Erik, Astrid A. Dick, Michael D. Smith. 2010. A Nearly Perfect Market? Differentiation Versus Price in Consumer Choice. *Quantitative Marketing and Economics*, **8**(1) 1-33.

37. Montgomery, Alan, Michael D. Smith. 2009. Prospects for Personalization on the Internet. *Journal of Interactive Marketing*, **23**(2) 130-137.

38. Smith, Michael, Rahul Telang. 2009. Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Internet Piracy. *Management Information Systems Quarterly*, **33**(2) 312-338.

39. Hosanagar, Kartik, John Chuang, Ramayya Krishnan, Michael D. Smith. 2008. Service Adoption and Pricing of Content Delivery Network Services. *Management Science*, **54**(9) 1579-1593.

40. Tang, Zhulei, Yu Hu, Michael D. Smith. 2008. Gaining Trust Through Online Privacy Protection: Self Regulation, Mandatory Standards, or Caveat Emptor. *Journal of Management Information Systems,* **24**(4) 152-173.

41. Krishnan, Ramayya, Michael D. Smith, Zhulei Tang, Rahul Telang. 2007. Digital Business Models for Peer-to-Peer Networks: Analysis and Economic Issues. *Review of Network Economics*, **6**(2) 194-213.

42. Ghose, Anindya, Michael D. Smith, Rahul Telang. 2006. Internet Exchanges for Used Books: An Empirical Analysis of Product Cannibalization and Welfare Impact. *Information Systems Research*, **17**(1) 3-19. (Runner-up for Best Published Paper in *Information Systems Research* in 2006.)

43. Asvanund, Atip, Karen Clay, Ramayya Krishnan, Michael D. Smith. 2004. An Empirical Analysis of Network Externalities in Peer-To-Peer Music Sharing Networks. *Information Systems Research*, **15**(2) 155-174.

44. Krishnan, Ramayya, Michael D. Smith, Rahul Telang. 2003. The Economics of Peer-To-Peer Networks. *Journal of Information Technology Theory and Applications*, **5**(3) 31-44.

45. Brynjolfsson, Erik, Yu Hu, Michael Smith. 2003. Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety. *Management Science,* **49**(11) 1580-1596. (Reprinted in *The International Library of Critical Writings in Economics,* Economics of E-Commerce, Baye and Morgan, eds. 2015.)

46. Smith, Michael. 2002. The Impact of Shopbots on Electronic Markets. *Journal of the Academy of Marketing Science*, **30**(4) 442-450.

47. Smith, Michael, Erik Brynjolfsson. 2001. Customer Decision Making at an Internet Shopbot: Brand Still Matters. *The Journal of Industrial Economics*, **49**(4) 541-558.

48. Brynjolfsson, Erik, Michael Smith. 2000. Frictionless Commerce? A Comparison of Internet and Conventional Retailers. *Management Science*, **46**(4) 563-585.
(Reprinted in *The International Library of Critical Writings in Economics,* Economics of E-Commerce, Baye and Morgan, eds. 2015; and *The International Library of Critical Writings in Economics,* Economics of Digitization, Greenstein, Goldfarb, and Tucker, eds., 2013.)

REFEREED CONFERENCE PROCEEDINGS

1. Tu, Xiaoying, Brett Danaher, Michael D. Smith. 2019. The Impact of Early International Digital Release of Films on U.S. Box Office Revenues. *Proceedings of the 2019 Americas Conference on Information Systems* (AMCIS), Cancun, Mexico, August 15-17.
2. Ananthakrishnan, Uttara, Michael D. Smith, Rahul Telang. 2016. When Streams Come True: Estimating the Impact of Free Streaming Activity on EST Sales. *International Conference on Information Systems*, Dublin, Ireland, December 11-14.
3. Ananthakrishnan, Uttara, Beibei Li, Michael D. Smith. 2015. A Tangled Web: The Impact of Displaying Fraudulent Reviews on Product Search Engines. *International Conference on Information Systems*, Fort Worth, Texas, December 13-16. (Nominee, Best Paper)
4. Kumar, Anuj, Michael D. Smith, Rahul Telang. 2012. The Impact of Information on Movie Sales Skewness. *Proceedings of the 33rd International Conference on Information Systems,* Orlando, FL, December 16-19.
5. Cho, Deagon, Michael Smith, Rahul Telang. 2012. Live Show Everywhere: Distribution Dynamics and Internet Influence on Concert Location. *Proceedings of the 45th Hawaii International Conference on Systems Science* (HICSS-45), Hawaii, January 4-7.
6. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2011. Sponsored Search: Do Organic Results Help or Hurt Advertising Performance and Under What Conditions? *Proceedings of the 32nd International Conference on Information Systems* (ICIS), Shanghai, China, December 4-7.
7. Garg, Rajiv, Michael Smith, Rahul Telang. 2011. Estimating Diffusion of Music in an Online Social Network. *Proceedings of the 44th Hawaii International Conference on Systems Science* (HICSS-44), Hawaii, January 4-7.
8. Chen, Pei-yu, Samita Dhanasobhon, Michael D. Smith. 2007. An Analysis of the Differential Impact of Reviews and Reviewers at Amazon.com. *Proceedings of the 28th International Conference on Information Systems* (ICIS), Montreal, Quebec, Canada, December 9-12.
9. Smith, Michael D., Rahul Telang. 2007. Analysis of the Impact of Movie Broadcasts on DVD Sales and Internet Piracy. *Proceedings of the 28th International Conference on Information Systems* (ICIS), Montreal, Quebec, Canada, December 9-12.
10. Ghose, Anindya, Michael D. Smith, Rahul Telang. 2004. Price Elasticities and Social Welfare in Secondary Electronic Markets. *Proceedings of the 25th International Conference on Information Systems* (ICIS), Washington, D.C., December 12-15. (Nominee, Best Paper Award.)
11. Krishnan, Ramayya, Michael Smith, Zhulei Tang, Rahul Telang. 2004. The Virtual Commons: Why Free-Riding Can Be Tolerated in File Sharing Networks. *Proceedings of the 37th Hawaii International Conference on System Sciences* (HICSS-37), Hawaii, January 5-8. (Runner-up, Best Paper Award.)
12. Hosanagar, Kartik, John Chuang, Ramayya Krishnan, Michael D. Smith. 2004. Optimal Pricing of Content Delivery Network Services. *Proceedings of the 37th Hawaii International Conference on System Sciences* (HICSS-37), Hawaii, January 5-8.
13. Farag, Neveen, Michael Smith, M.S. Krishnan. 2003. The Consumer Online Purchase Decision: A Model of Consideration Set Formation and Buyer Conversion Rate Across Market Leaders and Market Followers. *Proceedings of the 24th International Conference on Information Systems* (ICIS), Seattle, Washington, December 14-17.
14. Ghose, Anindya, Michael D. Smith, Rahul Telang. 2003. Internet Exchanges for Used Books: Welfare Implications and Policy Issues. *Proceedings of the 24th International Conference on Information Systems* (ICIS), Seattle, Washington, December 14-17.
15. Farag, Neveen, Michael Smith, M.S. Krishnan. 2003. Converting Visitors to Buyers via the Online Experience: An Empirical Evaluation. *Proceedings of the 2003 Americas Conference on Information Systems* (AMCIS), Tampa, FL, August 4-6.

16. Asvanund, Atip, Karen Clay, Ramayya Krishnan, Michael Smith. 2002. An Empirical Analysis of Network Externalities in Peer-To-Peer Music Sharing Networks. *Proceedings of the 23rd International Conference on Information Systems* (ICIS), Barcelona, Spain, December 15-18. (Runner-up, Best Paper Award)
17. Krishnan, Ramayya, Michael D. Smith, Zhulei Tang, Rahul Telang. 2002. The Virtual Commons: Why Free-Riding Can Be Tolerated in File Sharing Networks. *Proceedings of the 23rd International Conference on Information Systems* (ICIS), Barcelona, Spain, December 15-18.
18. Franklin, Judy, Michael Smith, Jay Yun. 1992. Learning Channel Allocation Strategies in Real Time, *Proceedings of the 42nd IEEE Vehicular Technology Conference*, Denver, Colorado, May.

BOOKS

1. Smith, Michael D. 2023. The Abundant University: Remaking Higher Education for a Digital World. *MIT Press*, Cambridge, MA. (Winner of the *2024 Frandson Award for Literature*.)
2. Smith, Michael D., Rahul Telang. 2016. Streaming, Sharing, Stealing: Big Data and the Future of Entertainment. *MIT Press*, Cambridge, MA. (Translated into Simplified and Complex Chinese, Korean, Japanese and Italian language versions.)

PROFESSIONAL JOURNALS & OP-EDS

1. "Pro Sports Has a Piracy Problem," *Harvard Business Review*, Digital. February 14, 2024 (with Brett Danaher and Rahul Telang). (https://hbr.org/2024/02/pro-sports-has-a-piracy-problem)
2. "The Public Is Giving Up on Higher Ed: Our current system isn't working for society. Digital alternatives can change that." *The Chronicle of Higher Education*, Print Edition, October 27, 2023. (https://www.chronicle.com/article/the-public-is-giving-up-on-higher-ed)
3. "Student loan forgiveness won't rein in tuition costs," *The Hill*. June 9, 2022. (https://thehill.com/opinion/education/3517622-student-loan-forgiveness-wont-rein-in-tuition-costs/)
4. "Lessons from Hollywood's Digital Transformation," *Harvard Business Review*, Insight Center: Taking On Digital Transformation. December 16, 2021. (https://hbr.org/insight-center/taking-on-digital-transformation, https://hbr.org/2021/12/lessons-from-hollywoods-digital-transformation)
5. "Reform Section 230 to Empower Parents and Protect Children," Story Partners. September 17, 2021 (with Marshall van Alstyne). (https://storypartnersdc.com/reform-section-230-to-empower-parents-and-protect-children/)
6. "It's Time to Update Section 230," *Harvard Business Review*, Digital. August 12, 2021 (with Marshall van Alstyne). (https://hbr.org/2021/08/its-time-to-update-section-230)
7. "Stop Censoring Fake Reviews," *Harvard Business Review*. Idea Watch, December 2020 (with Uttara M. Ananthakrishnan, and Beibei Li).
8. "Will Movie Theaters Survive When Audiences Can Stream New Releases?," *Harvard Business Review*, Digital. January 15, 2021 (with Gordon Burtch, Daegon Cho, and Yangfan Liang). (https://hbr.org/2021/01/will-movie-theaters-survive-when-audiences-can-stream-new-releases)
9. "The Digital-Piracy Dilemma," *Harvard Business Review*, Digital. October 19, 2020 (with Brett Danaher). (https://hbr.org/2020/10/the-digital-piracy-dilemma)
10. "Will Schools and Universities Ever Return to Normal? Nine experts on the future of education after the pandemic." *Foreign Policy*. September 5, 2020. (https://foreignpolicy.com/2020/09/05/education-schools-universities-future-after-pandemic/)
11. "The University is like a CD in the Streaming Age." *The Atlantic* online. June 22, 2020. (https://www.theatlantic.com/ideas/archive/2020/06/university-like-cd-streaming-age/613291/)
12. "Why Isn't Hulu Better?" *Harvard Business Review*, Digital. April 25, 2020 (with Rahul Telang). (https://hbr.org/2019/04/why-isnt-hulu-better)

13. "Netflix and the Economics of Bundling." *Harvard Business Review*, Digital. February 25, 2019 (with Rahul Telang). (https://hbr.org/2019/02/netflix-and-the-economics-of-bundling)
14. "Godspeed to AT&T-Time Warner: The $85 billion merger isn't aimed at dominating cable TV. It's an attempt to take on Silicon Valley." *Wall Street Journal*, June 13, 2018 (with Rahul Telang). Opinion Section, Page A21. (https://www.wsj.com/articles/godspeed-to-at-t-time-warner-1528844403)
15. "How the DOJ's Attempt to Block the AT&T-Time Warner Merger Could Backfire." *Fortune Magazine*, March 16, 2018 (with Rahul Telang). (http://fortune.com/2018/03/16/att-time-warner-merger-doj-block-attempt/)
16. "Data Can Enhance Creative Projects — Just Look at Netflix." *Harvard Business Review*, Digital. January 23, 2018 (with Rahul Telang). (https://hbr.org/2018/01/data-can-enhance-creative-projects-just-look-at-netflix)
17. "Why Digital Media Require A Strategic Rethink." *Harvard Business Review*. Idea Watch, October 2012 (with Rahul Telang). (https://hbr.org/2012/10/why-digital-media-require-a-strategic-rethink)
18. "Delaying Content Leaves Money on the Table." Opinion and Editorial Page. *The Hill*. November 11, 2011 (with Rahul Telang). (http://thehill.com/opinion/op-ed/196051-delaying-content-leaves-money-on-the-table)
19. "From Niches to Riches: The Anatomy of the Long Tail." *Sloan Management Review*, **47**(4 Summer 2006), 67-71 (with Erik Brynjolfsson, Yu "Jeffrey" Hu).

CASE WRITING

Kemerer, Chris F., Michael D. Smith. 2018. Apple v. The FBI. *Ivey School of Business Publishing*. Case Number 9B18E013, September 10, 2018.

BOOK CHAPTERS, INVITED PUBLICATIONS, AND OTHER PAPERS

1. Smith, Michael D. 2023. What the Online Piracy Data Tells Us About Copyright Policymaking, *Hudson Institute Policy Memo*, April 2023. (https://www.hudson.org/intellectual-property/what-online-piracy-data-tells-us-about-copyright-policymaking)
2. Smith, Michael D., Rahul Telang. 2022. The Enforcement of Intellectual Property Rights in a Digital Era, in *Trade in Knowledge: Intellectual Property, Trade and Development in a Transformed Global Economy,* Taubman, Watal eds., World Trade Organization, Cambridge University Press.
3. Danaher, Brett, Michael D. Smith, Rahul Telang. 2020. Piracy Landscape Study: Analysis of Existing and Emerging Research Relevant to Intellectual Property Rights Enforcement of Commercial-Scale Piracy. U.S. Patent and Trademark Office, Economic Working Paper No. 2020-02, April 2020.
4. Smith, Michael D., Alejandro Zentner. 2016. Internet Effects on Retail Markets, Basker, ed. *Handbook on the Economics of Retail and Distribution*, Chapter 18 (pp. 433-454), Edward Elgar Publishing, Cheltenham, UK. (http://ssrn.com/abstract=2594807)
5. Danaher, Brett, Michael D. Smith, Rahul Telang. 2015. Copyright Enforcement in the Digital Age: Empirical Economic Evidence and Conclusions. World Intellectual Property Organization, Advisory Committee on Enforcement, Geneva, Switzerland. (http://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_10/wipo_ace_10_20.pdf)
6. Danaher, Brett, Samita Dhanasobhon, Michael D. Smith, Rahul Telang. 2015. Understanding Media Markets in the Digital Age: Economics and Methodology, Goldfarb, Greenstein, and Tucker, eds. *Economic Analysis of the Digital Economy*. Chapter 13 (pp. 385-406), University of Chicago Press, Chicago, Illinois. (Reprinted in the Alfred P. Sloan Foundation Economic Research Papers series.) (http://ssrn.com/abstract=2355640)
7. Danaher, Brett, Michael D. Smith, Rahul Telang. 2014. Piracy and Copyright Enforcement Mechanisms, Lerner and Stern, eds. *Innovation Policy and the Economy*, Volume 14, Chapter 2 (pp. 31-67), National

Bureau of Economic Research, University of Chicago Press, Chicago, Illinois. (http://ssrn.com/abstract=2273716)

8. Garg, Rajiv, Michael D. Smith, Rahul Telang. 2009. The Role of Peer Influence in Marketing Online Social Networks. *International Association of Business Communications*, Student Connection, Haris Krijestorac and Manolis Kounelakis, eds, December.
9. Clay, Karen, Ramayya Krishnan, Michael D. Smith. 2001. The Great Experiment: Pricing on the Internet, Lowry, Cherrington, and Watson, eds. *Handbook of Electronic Commerce in Business and Society*. CRC Press, New York, 139-152.
10. Smith, Michael, Joseph Bailey, Erik Brynjolfsson. 2000. Understanding Digital Markets: Review and Assessment, Brynjolfsson and Kahin, eds. *Understanding the Digital Economy*, MIT Press, Cambridge, MA, 99-136.

PATENT

Smith, Michael, Allen Bonde, Gregory Catherine, Rosemarie Napolitano, Diane Wolfe. 1998. "Fuzzy logic-based evidence fusion tool for network analysis," US Patent Number 5,787,235.

WORKING PAPERS AND MIMEOS

1. Ma, Liye, Alan Montgomery, Michael D. Smith. 2016. The Dual Impact of Movie Piracy on Box-Office Revenue: Cannibalization and Promotion. (http://ssrn.com/abstract=2736946)
2. Choi, Patrick, Peter Boatwright, Michael D. Smith. 2015. The Perfect Storm: Using Snowstorms to Analyze the Effect of Theatrical Attendance on the Demand for Subsequently Released DVDs. *Mimeo*. (http://ssrn.com/abstract=2639303)
3. Smith, Michael D., Rahul Telang, Yi Zhang. 2013. Analysis of the Potential Market for Out-of-Print eBooks. *Mimeo*. (http://ssrn.com/abstract=2141422)
4. Brynjolfsson, Erik, Yu Hu, Michael Smith. 2012. The Longer Tail: The Changing Shape of Amazon's Sales Distribution Curve. *Mimeo.* (http://ssrn.com/abstract=1679991)
5. Chen, Pei-yu, Samita Dhanasobhon, Michael D. Smith. 2009. All Reviews are Not Created Equal: The Disaggregate Impact of Reviews and Reviewers at Amazon.com. *Mimeo*. (http://ssrn.com/abstract=918083)
6. Smith, Michael D., Rahul Telang. 2008. Internet Exchanges for Used Digital Goods. *Mimeo*. (http://ssrn.com/abstract=1086358)
7. Asvanund, Atip, Ramayya Krishnan, Michael D. Smith, Rahul Telang. 2008. Interest-based Self-organizing Peer-to-Peer Networks: A Club Economics Approach. *Mimeo*. (http://ssrn.com/abstract=585345)
8. Krishnan, Ramayya, Michael D. Smith, Zhulei Tang, Rahul Telang. 2008. The Virtual Commons: Why Free-Riding Can Be Tolerated in File Sharing Networks. *Mimeo*. (http://ssrn.com/abstract=450241)

PAPERS IN CONFERENCE PROGRAMS

1. Chu, Yi-yun, Uttara Ananthakrishnan, Michael D. Smith. 2024. Does Occupational Licensing Improve Service Quality? Evidence from Yelp.com. *Twentieth Symposium on Statistical Challenges in Electronic Commerce Research*, Lisbon, Portugal, June 19-21.
2. Zeng, Helen, Brett Danaher, Michael D. Smith. 2024. How Online Markets Expand the Reach of Offline Harms: The Case of Craigslist's Erotic Services Section. *Twentieth Symposium on Statistical Challenges in Electronic Commerce Research*, Lisbon, Portugal, June 19-21.
3. Zeng, Helen, George Chen, Brett Danaher, Michael D. Smith. 2023. Holding Digital Platforms Accountable for Online Child Trafficking? Evidence from Two Escort Review Sites. *Workshop on Information Systems and Economics*, Hyderabad, India, December 13-15.

4. Oros, Jose, Jacqueline Doremus, Kyle Kretschman, Michael Smith, Rahul Telang. 2023. Playlist-Induced Spillovers: Examining Off-Platform Concert Activity for Emerging Artists on Spotify. Workshop on Information Systems and Economics, Hyderabad, India, December 13-15.
5. Dai, Jingwei, Emaad Manzoor, Michael D. Smith. 2023. The Sound Of Silence: Effect Of Disclosing User Location On Users' Social Engagement. *INFORMS Annual Meeting*, Phoenix, Arizona, October 15-18.
6. Van Alstyne, Marshall, Michael D. Smith, Herb Lin. 2023. Improving Section 230, Preserving Democracy, and Protecting Free Speech. *Leading and Managing in the Digital Era*, Athens, Greece, June 19-20.
7. Chu, Yi-Yun, Brett Danaher, Michael D. Smith. 2023. The Impact of Piracy Quality on Box Office Revenue. *Nineteenth Symposium on Statistical Challenges in Electronic Commerce Research*, Bogata, Columbia, June 8-10.
8. Danaher, Brett, Michael D. Smith. 2023. The Effect of Day-and-Date High-Quality Piracy on Box-Office Revenues. *Nineteenth Symposium on Statistical Challenges in Electronic Commerce Research*, Bogata, Columbia, June 8-10.
9. Zeng, Helen (Shuxuan), Yan Huang, Gord Burtch, Michael D. Smith. 2022. The Where, When, and Why of Movie Piracy - A Structural Model of Movie Piracy vs. Legal (in-Theater) Consumption. *Conference on Information Systems and Technology*, Indianapolis, Indiana, October 15-16.
10. Liang, Yangfan, Mi Zhou, Pedro Ferreira, Michael D. Smith. 2022. The Impact of Instructor Personality on the Success of Online Educational Videos: A Multimodal Deep Learning Approach. *Conference on Information Systems and Technology*, Indianapolis, Indiana, October 15-16.
11. Zeng, Helen (Shuxuan), Brett Danaher, Michael D. Smith. 2022. Human-Trafficking and Internet Governance: Measuring the Effect of the FOSTA-SESTA Law. Video Presentation. *Platform Strategy Research Symposium,* Boston, Massachusetts, July 19.
12. Manzoor, Emaad, George Chen, Dokyun Lee, Michael D. Smith. 2021. Trading Off Between Equitable Deliberation and Incentivized Participation Online. *2021 Workshop on Information Systems and Economics*, Austin, Texas, December 15-17.
13. Zeng, Helen (Shuxuan), Brett Danaher, Michael D. Smith. 2021. Human-Trafficking and Internet Governance: Measuring the Effect of the FOSTA-SESTA Law. *Conference on Information Systems and Technology*, Newport Beach, California, October 23-24.
14. Liang, Yangfan, Mi Zhou, Pedro Ferreira, Michael D. Smith. 2021. The Impact of Instructor Personality on the Success of Online Educational Videos: A Multimodal Deep Learning Approach. *2021 Workshop on Information Systems and Economics*, Austin, Texas, December 15-17.
15. Zeng, Helen (Shuxuan), Brett Danaher, Michael D. Smith. 2021. Human-Trafficking and Internet Governance: Measuring the Effect of the FOSTA-SESTA Law. *National Bureau of Economic Research Summer Institute*, Economics of IT and Digitization Workshop, Cambridge, Massachusetts, July 22-23.
16. Liang, Yangfan, Pedro Ferreira, Michael D. Smith, Mi Zhou. 2021. The Impact of Instructor Personality on the Success of Online Educational Videos. *Seventeenth Symposium on Statistical Challenges in Electronic Commerce Research*, June 17-18.
17. Manzoor, Emaad, George Chen, Dokyun Lee, Michael D. Smith. 2021. Influence via Ethos: On the Persuasive Power of Reputation in Deliberation Online. *AAAI-21 Workshop on AI For Behavior Change*, February 8.
18. Burtch, Gord, Daegon Cho, Yangfan Liang, Michael D. Smith. 2020. The Impact of Early Digital Movie Releases on Box Office Revenue: Evidence from the Korean Market. *2020 Workshop on Information Systems and Economics*, December 16-19.
19. Zeng, Helen, Brett Danaher, Michael D. Smith. 2020. Internet Governance Through Site Shutdowns: Measuring the Effect of the FOSTA-SESTA Anti-Tracking Law. *2020 Workshop on Information Systems and Economics*, December 16-19.

20. Manzoor, Emaad, George Chen, Dokyun Lee, Michael D. Smith. 2020. Influence via Ethos: On the Persuasive Power of Reputation in Deliberation Online. *2020 Conference on Information Systems and Technology*, November 7-8.
21. Manzoor, Emaad, George Chen, Dokyun Lee, Michael D. Smith. 2020. Influence via Ethos: On the Persuasive Power of Reputation in Deliberation Online. *2020 Conference on Computational Sociology*, Stanford University, Palo Alto, CA, August 7.
22. Zeng, Helen, Brett Danaher, Michael D. Smith. 2020. Does Shutting Down Internet Advertising Portals for Prostitution Affect Violence Towards Women? *Sixteenth Symposium on Statistical Challenges in Electronic Commerce Research*, June 18-20.
23. Manzoor, Emaad, George Chen, Dokyun Lee, Michael D. Smith. 2020. Equitable Persuasion in Incentivized Deliberation — An Impossible Tradeoff? *Sixteenth Symposium on Statistical Challenges in Electronic Commerce Research*, June 18-20.
24. Zhou, Mi, George Chen, Pedro Ferreira, Michael Smith. 2019. Disrupting Class: Using Video Analytics and Machine Learning to Understand Student Behavior Online. *Workshop on Information Systems and Economics*, Munich, Germany, December 19-20.
25. Zeng, Helen, Michael D. Smith, Brett Danaher. 2019. Fighting Sex Trafficking in the Digital Age: Analyzing the Impact of FOSTA/SESTA. *Center for the Protection of Intellectual Property, Copyright Research Symposium: Safe Harbors and Private Ordering in the Creative Industries*, Arlington, Virginia, October 18.
26. Sim, Jaeung, Daegon Cho, Michael D. Smith. 2019. An Empirical Analysis of the Impact of Smartphone Adoption on Television Viewing. *Symposium on Statistical Challenges in Electronic Commerce Research (SCECR)*, Hong Kong, June 10-13.
27. Zhou, Mi, George Chen, Pedro Ferreira, Michael D. Smith. 2019. Distupting Class: Using Video Analytics and Machine Learning to Understand Student Engagement Online. *ISOM Research Workshop*, Gainesville, Florida, March 14.
28. Danaher, Brett, Michael D. Smith. 2018. The Windowing Challenge: Do Shorter Home Video Release Windows Cannibalize Box Office Ticket Sales? *Workshop on Information Systems and Economics*, San Francisco, CA, December 17-18.
29. Smith, Michael D., Rahul Telang, Mattia Nardotto, Tomaso Valetti. 2018. The Impact of Piracy Notice Sending on Consumer Behavior for Entertainment: Evidence from a Randomized Field Experiment in the UK. *Conference on Digital Experimentation @ MIT*, Cambridge, MA, October 26-27.
30. Smith, Michael D., Rahul Telang, Mattia Nardotto, Tomaso Valetti. 2018. The Impact of Piracy Notice Sending on Consumer Behavior for Entertainment: Evidence from a Randomized Field Experiment in the UK. *Center for the Protection of Intellectual Property Fall Conference*, Washington, DC, October 12.
31. Smith, Michael D., Rahul Telang, Mattia Nardotto, Tomaso Valetti. 2018. The Impact of Piracy Notice Sending on Consumer Behavior for Entertainment: Evidence from a Randomized Field Experiment in the UK. *20th Annual Mallen Economics of Filmed Entertainment Conference*, Berlin, Germany, September 27-28.
32. Smith, Michael D., Rahul Telang, Mattia Nardotto, Tomaso Valetti. 2018. The Impact of Piracy Notice Sending on Consumer Behavior for Entertainment: Evidence from a Randomized Field Experiment in the UK. *Music Industry Research Association (MIRA) Conference*, Los Angeles, CA, June 25-26.
33. Burtch, Gord, Edward McFowland III, Michael D. Smith. 2018. On the Relationships Between Movie Piracy, File Quality and Box Office Sales. *Statistical Challenges in Electronic Commerce Research*. Rotterdam, Netherlands, June 18-19.
34. Montgomery, Alan, Michael D. Smith, Xiaoying Tu. 2017. Streaming Toward Sales: Competition and Complementarities in Online Music Consumption. *Workshop on Information Systems and Economics*. Seoul, South Korea, December 14-15.

35. Burtch, Gord, Edward McFowland III, Michael D. Smith. 2017. On the Relationships Between Movie Piracy, File Quality and Box Office Sales. *Workshop on Information Systems and Economics* (short presentation series). Seoul, South Korea, December 14-15.

36. Ananthakrishnan, Uttara, Michael D. Smith, Rahul Telang. 2017. When Streams Come True: Estimating the Impact of Free Streaming Activity on EST Sales. *19th Annual Mallen Economics of Filmed Entertainment Conference*, New York, NY, November 9-10.

37. Danaher, Brett, Michael D. Smith, Xiaoying Tu. 2017. The Impact of Early International Digital Release of Films on U.S. Box Office Revenues. *Conference on Information Systems and Technology*. Houston, Texas, October 22-25.

38. Smith, Michael D., Rahul Telang, Yi Zhang. 2017. I Want You Back: An Empirical Analysis of the Interplay Between Legal Availability and Movie Piracy. USPTO Conference on the Economic Impacts of Intellectual Property on Market Outcomes. Alexandria, Virginia, September 22.

39. Mongtomery, Alan, Michael D. Smith, Xiaoying Tu. 2017. Streaming Toward Sales: Competition and Complementarities in Online Music Streaming. *Music Industry Research Association Conference*, UCLA Luskin Conference Center, Los Angeles, CA, August 10-11.

40. Tu, Xiaoying, Brett Danaher, Michael D. Smith. 2016. The Effect of Early International Digital Movie Releases on Domestic Box Office Sales. *Workshop on Information Systems and Economics*, Dublin, Ireland, December 14-16.

41. Ananthakrishnan, Uttara, Michael D. Smith, Rahul Telang. 2016. When Streams Come True: Estimating the Impact of Free Streaming Activity on EST Sales. *Workshop on Information Systems and Economics*, Dublin, Ireland, December 14-16.

42. Michael D. Smith, Rahul Telang. 2016. Panel: Big Data and the Future of Entertainment. *Conference on Information Systems and Technology*, Nashville, Tennessee, November 12-13.

43. Ananthakrishnan, Uttara, Michael D. Smith, Rahul Telang. 2016. When Streams Come True: Estimating the Impact of Free Streaming Activity on EST Sales. *Conference on Information Systems and Technology*, Nashville, Tennessee, November 12-13.

44. Smith, Michael D., Rahul Telang. 2016. Digital Advertising, Targeting, and Retargeting: Lessons from Randomized Field Experiments, *18th Annual Mallen Economics of Filmed Entertainment Conference*, November 10-11.

45. Godinho de Matos, Miguel, Pedro Ferreira, Michael D. Smith. 2016. The Effect of TV Content on Piracy: Evidence From a Household Level Randomized Experiment. *Conference on Digital Experimentation*, MIT Sloan School of Management, Cambridge, Massachusetts, October 14-15.

46. Tu, Xiaoying, Brett Danaher, Michael D. Smith. 2016. The Effect of Early International Digital Movie Releases on Domestic Box Office Sales. *Conference on Data Science in the Entertainment Industries*, Santa Monica, California, August 18-19.

47. Smith, Michael D., Rahul Telang. 2016. Targeting, Retargeting, and the Effectiveness of Search Engine Advertising: Evidence from Randomized Field Experiments. *National Bureau of Economic Research Summer Institute*, Economics of IT and Digitization Workshop, Cambridge, Massachusetts, July 21-22.

48. Danaher, Brett, Michael D. Smith, Rahul Telang. 2016. The Effect of Piracy Website Blocking on Consumer Behavior. *Harvard Business School, Digital Initiative Symposium*, Cambridge, Massachusetts, May 5-6.

49. Ananthakrishnan, Uttara, Beibei Li, Michael D. Smith. 2015. All World's a Home - Estimating Hotel Latent Quality under Airbnb Entry. *Workshop on Information Systems and Economics*, Dallas, Texas, December 12-13.

50. Danaher, Brett, Michael D. Smith, Rahul Telang. 2015. Windows of Opportunity: The Impact of Early Digital Movie Releases. *Workshop on Information Systems and Economics*, Dallas, Texas, December 12-13.

51. Danaher, Brett, Michael D. Smith, Rahul Telang. 2015. Copyright Enforcement in the Digital Age: Empirical Economic Evidence and Conclusions. *World Intellectual Property Organization, Advisory Committee on Enforcement*, Tenth Session, Geneva, Switzerland, August 25.

52. Ananthakrishnan, Uttara, Beibei Li, Michael D. Smith. 2015. A Tangled Web: Evaluating the Impact of Displaying Fraudulent Reviews. *INFORMS Conference on Information Systems and Technology*, Philadelphia, PA, October 31 – November 1.

53. Ananthakrishnan, Uttara, Beibei Li, Michael D. Smith. 2015. A Tangled Web: The Impact of Displaying Fraudulent Reviews on Product Search Engines. *The 9th China Summer Workshop on Information Management*, Hefei University of Technology, Hefei, China, June 27-28.

54. Godinho de Matos, Miguel, Pedro Ferreira, Michael D. Smith. 2015. The Effect of Subscription Video-On-Demand on Piracy: Evidence from a Household Level Randomized Experiment. *National Bureau of Economic Research Summer Institute*, Economics of IT and Digitization Workshop, Cambridge, Massachusetts, July 16-17.

55. Choi, Patrick, Peter Boatwright, Michael D. Smith. 2015. When It Snows, It Pours: The Effect of Theatrical Attendance on the Demand of Subsequent DVD Purchases. *Marketing Science Conference,* Baltimore, Maryland, June 18-20.

56. Ananthakrishnan, Uttara, Beibei Li, Michael D. Smith. 2015. The Importance of Being Earnest: Evaluating the Impact of Displaying Fraudulent Reviews on Review Portals. *Winter Conference on Business Intelligence*, Snowbird, Utah, March 12-14.

57. Stephens-Davidowitz, Seth, Hal Varian, Michael D. Smith. 2015. Super Returns? The Effects of Ads on Product Demand. *Allied Social Science Associations, Industrial Organization Society Meeting*, Digital Media Economics, Boston, Massachusetts, January 3-5.

58. Ma, Liye, Alan Montgomery, Michael D. Smith. 2014. The Dual Impact of Movie Piracy on Box-Office Revenue: Cannibalization and Promotion. *Workshop on Information Systems and Economics*, Auckland, New Zealand, December 17-19.

59. Smith, Michael D., Rahul Telang. 2014. Targeting, Retargeting and the Effectiveness of Search Engine Advertising: Evidence from Randomized Field Experiments. *Conference on Digital Experimentation @ MIT*, Cambridge, Massachusetts, October 10.

60. Sivan, Liron, Michael D. Smith, Rahul Telang. 2014. Do Search Engines Influence Media Piracy? Evidence from a Randomized Field Study. *National Bureau of Economic Research Summer Institute*, Economics of IT and Digitization Workshop, Cambridge, Massachusetts, July 17-18.

61. Stephens-Davidowitz, Seth, Hal Varian, Michael D. Smith. 2014. Super Returns? The Effects of Ads on Product Demand. *National Bureau of Economic Research Summer Institute*, Industrial Organization Workshop, Cambridge, Massachusetts, July 17-18.

62. Danaher, Brett, Michael D. Smith. 2014. Gone in 60 Seconds: The Impact of the Megaupload Shutdown on Movie Sales. *Winter Conference on Business Intelligence*, Snowbird, Utah, February 27 – March 1.

63. Gong, Jing, Michael D. Smith, Rahul Telang. 2013. Pricing and Promotions in Digital Channels: Measuring Sales Response to Price Discounts and Promotional Placements. *Workshop on Information Systems and Economics (WISE),* Milan, Italy, December 19-20.

64. Danaher, Brett, Michael D. Smith. 2013. Gone in 60 Seconds: The Impact of the Megaupload Shutdown on Movie Sales. *The Third Annual Research Roundtable on The Law and Economics of Digital Markets*, Searle Center on Law Regulation and Economic Growth, Northwestern University School of Law, Chicago, IL, July 30.

65. Godinho De Matos, Miguel, Pedro Ferreira, Rahul Telang, Michael D. Smith. 2013. The Impact of Likes on the Sales of Movies in Video-on-Demand: a Randomized Experiment. *National Bureau of Economic Research Summer Institute*, Economics of IT and Digitization Workshop, Cambridge, Massachusetts, July 18-19.

66. Danaher, Brett, Michael D. Smith. 2013. Gone in 60 Seconds: The Impact of the Megaupload Shutdown on Movie Sales. *National Bureau of Economic Research Summer Institute*, Economics of IT and Digitization Workshop, Cambridge, Massachusetts, July 18-19.

67. Ferreira, Pedro, Miguel Godinho de Matos, Michael D. Smith, Rahul Telang. 2013. The Impact of Popularity on Sales of Movies in Video-on-Demand: a Randomized Experiment. *Ninth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR)*, Lisbon, Portugal, June 27-28.

68. Danaher, Brett, Michael D. Smith. 2013. Gone in 60 Seconds: The Impact of the Megaupload Shutdown on Movie Sales. *Ninth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR)*, Lisbon, Portugal, June 27-28.

69. Smith, Michael D., Rahul Telang. 2013. Release Windows, Piracy, and DVD Sales: Making Sense of the Data. *11th Annual ZEW Conference on the Economics of Information and Communications Technologies*, Mannheim, Germany, June 21-22.

70. Danaher, Brett, Michael D. Smith, Rahul Telang. 2013. Understanding Media Markets in the Digital Age: Economics and Methodology. *National Bureau of Economic Research, Economics of Digitization: An Agenda*. Park City, Utah. June 6-7.

71. Danaher, Brett, Michael D. Smith, Rahul Telang, Siwen Chen. 2013. The Effect of Graduated Response Anti-Piracy Laws on Music Sales: Evidence from an Event Study in France. *The 11th Annual International Industrial Organization Conference*. Media Markets Session. Boston, Massachusetts, May 17-19.

72. Danaher, Brett, Michael D. Smith. 2013. Gone in 60 Seconds: The Impact of the Megaupload Shutdown on Movie Sales. *The 11th Annual International Industrial Organization Conference*. Media and Advertising Session. Boston, Massachusetts, May 17-19.

73. Danaher, Brett, Michael D. Smith, Rahul Telang. 2013. Piracy and Copyright Enforcement Mechanisms. *National Bureau of Economic Research,* Innovation Policy and the Economy Conference, Washington, DC, April 23.

74. Ferreira, Pedro, Miguel Godinho de Matos, Michael D. Smith, Rahul Telang. 2013. The Impact of Popularity on Sales of Movies in Video-on-Demand: a Randomized Experiment. *The National Bureau of Economic Research Economics of Digitization Workshop*. Stanford, California, March 8.

75. Danaher, Brett, Michael D. Smith. 2012. Gone in 60 Seconds: The Impact of the Megaupload Shutdown on Movie Sales. *Workshop on Information Systems and Economics (WISE),* Orlando, Florida, December 15-16.

76. Danaher, Brett, Michael D. Smith, Rahul Telang, Siwen Chen. 2012. The Effect of Graduated Response Anti-Piracy Laws on Music Sales: Evidence from an Event Study in France. *Fifth Annual Federal Trade Commission Microeconomics Conference*, Washington, D.C., November 15-16.

77. Danaher, Brett, Yan Huang, Michael D. Smith, Rahul Telang. 2012. An Empirical Analysis of Digital Music Bundling Strategies. *The Second Annual Research Roundtable on The Law and Economics of Digital Markets*, Searle Center on Law Regulation and Economic Growth, Northwestern University School of Law, Chicago, IL, October 11-12.

78. Hu, Yu, Michael D. Smith. 2012. The Impact of eBook Distribution on Print Sales: Analysis of a Natural Experiment. *National Bureau of Economic Research*, Summer Institute, Economics of Information Technology and Digitization Workshop, Cambridge, Massachusetts, July 19-20.

79. Danaher, Brett, Michael D. Smith, Rahul Telang. 2012. Pro-Copyright Enforcement in a Digital Age. *National Bureau of Economic Research*, Economics of Digitization: An Agenda, Chicago, Illinois, June 28-29.

80. Smith, Michael D., Alejandro Zentner. 2012. Bricks, Clicks, Blockbusters, and Long Tails: How Video Rental Patterns Change as Consumers Move Online. *Eighth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR)*, Montreal, Canada, June 28-29.

81. Smith, Michael D., Alejandro Zentner. 2012. Bricks, Clicks, Blockbusters, and Long Tails: How Video Rental Patterns Change as Consumers Move Online. *The 3rd Annual Conference on Internet Search and Innovation*, Chicago, Illinois, June 21-22.

82. Danaher, Brett, Yan Huang, Michael D. Smith, Rahul Telang. 2012. An Empirical Analysis of Digital Music Bundling Strategies. *INFORMS Marketing Science Conference*, Internet and Interactive Marketing Track, Boston, MA, June 7-9.

83. Smith, Michael D., Alejandro Zentner. 2012. Bricks, Clicks, Blockbusters, and Long Tails: How Video Rental Patterns Change as Consumers Move Online. *The 10th Annual International Industrial Organization Conference (IIOC)*, Technology and Information Track, Arlington, VA, March 16-18.

84. Hu, Yu, Michael D. Smith. 2012. The Impact of eBook Distribution on Print Sales: Analysis of a Natural Experiment. *University of Utah Winter Conference on Business Intelligence*, Snowbird, UT, March 1-3.

85. Smith, Michael D., Alejandro Zentner. 2012. Brick, Click, Blockbusters, and Long Tails: How Video Rental Patterns Change as Consumers Move Online. *Conference on Management and Economics of ICT*, Munich, Germany, February 29-March 2.

86. Hu, Yu, Michael D. Smith. 2012. The Impact of Ebook Distribution on Print Sales: Analysis of a Natural Experiment. The 2012 Information Systems and Operations Management Workshop on Challenges and Opportunities in Managing IT Enabled Multichannel Operations. University of Florida, Gainesville, FL, February 10-11.

87. Danaher, Brett, Michael D. Smith, Rahul Telang. 2011. The Effect of Graduated Response Anti-Piracy Laws on Media Sales: Evidence from an Event Study in France. *Workshop on Information Systems and Economics (WISE)*, Shanghai, China, December 7-9.

88. Hu, Yu, Michael D. Smith. 2011. The Impact of eBook Distribution on Print Sales: Analysis of a Natural Experiment. *INFORMS Annual Meetings*, Digital Channel and IT Usage Track, Charlotte, NC, November 13-16.

89. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2011. Location, Location and Location: An Analysis of Profitability and Position in Online Advertising. *INFORMS Annual Meetings*, Washington, DC, October 12-15.

90. Kumar, Anuj, Michael D. Smith, Rahul Telang. 2011. Information Discovery and the Long Tail of Motion Picture Content. *National Bureau of Economic Research*, Summer Institute, Economics of Information Technology and Digitization Workshop, Cambridge, Massachusetts, July 22-23.

91. Kumar, Anuj, Michael D. Smith, Rahul Telang. 2011. Channels and Conflict: Effective Marketing Strategies for Internet Digital Distribution Channels. *Marketing Science Conference*, Internet and Interactive Media Track, Houston, Texas, June 9-10.

92. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2011. Sponsored Search: Do Organic Results Help or Hurt the Performance and Under What Conditions? *Second Annual Conference on Internet Search and Innovation*, Northwestern University, School of Law, Evanston, Illinois, June 7-8.

93. Kumar, Anuj, Michael D. Smith, Rahul Telang. 2010. The Broadcast Window Effect: Information Discovery and Cross-Channel Substitution Patterns for Media Content. *Workshop on Information Systems and Economics (WISE)*, St. Louis, Missouri, December 12-13.

94. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2010. Sponsored Search: Do Organic Results help or hurt Performance. *Workshop on Information Systems and Economics (WISE)*, St. Louis, Missouri, December 12-13.

95. Fichman, Mark, Tat Koon Koh, Michael D. Smith. 2010. Multi-homing Users' Preferences for Two-Sided Exchange Networks. *Conference on Information Systems and Technology (CIST)*, Austin, Texas, November 6-7.

96. Fichman, Mark, Tat Koon Koh, Michael D. Smith. 2010. The More the Merrier: Intra-Network Externalities and Multi-Homing in 2-Sided Markets. *Sixth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR)*, Austin, Texas, June 5-6.

97. Kumar, Anuj, Michael D. Smith, Rahul Telang. 2010. Where'd They Go? Cross-Channel Media Consumption Patterns During Broadcast Blackout Windows. *Sixth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR)*, Austin, Texas, June 5-6.

98. Danaher, Brett, Samita Dhanasobhon, Michael D. Smith, Rahul Telang. 2010. Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy. *Industries Studies Conference, Industry Studies Association Meetings*, Chicago, Illinois, May 6-7.

99. Garg, Rajiv, David Krackhardt, Michael Smith, Rahul Telang. 2009. Estimating Diffusion of Music in an Online Social Network. *Winter Conference on Business Intelligence*, David Eccles School of Business, University of Utah, Salt Lake City, Utah, March 11-13.

100. Ma, Liye, Alan Montgomery, Param Singh, Michael D. Smith. 2009. Pre-Release Movie Piracy and Box Office Revenue: Estimates and Policy Implications. *Workshop on Information Systems and Economics (WISE)*, Phoenix, Arizona, December 14-15.

101. Brynjolfsson, Erik, Jeffrey Hu, Michael D. Smith. 2009. A Longer Tail?: Estimating The Shape of Amazon's Sales Distribution Curve in 2008. *Workshop on Information Systems and Economics (WISE)*, Poster Session, Phoenix, Arizona, December 14-15.

102. Garg, Rajiv, Michael D. Smith, Rahul Telang. 2009. Peer Influence and Information Diffusion in Online Networks: An Empirical Analysis. *Conference on Information Systems and Technology (CIST)*, San Diego, California, October 10-11.

103. Danaher, Brett, Samita Dhanasobhon, Michael D. Smith, Rahul Telang. 2009. Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy. *NBER Workshop on Information Technology and Economics*, Boston, Massachusetts, July 17.

104. Danaher, Brett, Samita Dhanasobhon, Michael D. Smith, Rahul Telang. 2009. Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy. *Society for Economic Research on Copyright Issues 2009 Congress (SERCI)*, San Francisco, California, July 9-10.

105. Smith, Michael D. 2009. Does the Economics of Information and Communications Technologies Matter? Discussion and Application to Digital Media Research. Invited Keynote Address, *7th Annual ZEW Conference on the Economics of Information and Communications Technologies*, Mannheim, Germany, July 3-4, 2009.

106. Ma, Liye, Param Vir Singh, Michael D. Smith. 2009. No Meaningful Impact? The Effect of Pre-Release Piracy on Movie Box Office Sales. *Fifth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR)*, Pittsburgh, Pennsylvania, May 30-31.

107. Garg, Rajiv, Michael D. Smith, Rahul Telang. 2009. Peer Influence and Information Diffusion on Online Social Networks. *Fifth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR)*, Pittsburgh, Pennsylvania, May 30-31.

108. Danaher, Brett, Samita Dhanasobhon, Michael D. Smith, Rahul Telang. 2009. Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy. *International Industrial Organization Conference (IIOC)*, Boston, Massachusetts, April 3-5.

109. Danaher, Brett, Samita Dhanasobhon, Michael D. Smith, Rahul Telang. 2008. Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy. *Workshop on Information Systems and Economics (WISE)*, Paris, France, December 13-14.

110. Danaher, Brett, Samita Dhanasobhon, Michael D. Smith, Rahul Telang. 2008. Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy. *Web 2.0 Workshop on Economics, Law and Information Systems*, Mannheim, Germany, December 11-12.

111. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2008. Location, Location and Location: An Analysis of Profitability and Position in Online Advertising. *INFORMS Annual Meetings*, Washington, DC, October 12-15.

112. Dhanasobhon, Samita, Michael D. Smith, Rahul Telang. 2008. Digital Distribution: The Impact of New Digital Distribution Channels on Internet Piracy. *INFORMS Annual Meetings*, Washington, DC, October 12-15.

113. Brynjolfsson, Erik, Yu Jeffrey Hu, Michael D. Smith. 2008. Profit in the Long Tail. *INFORMS Annual Meetings*, Washington, DC, October 12-15.

114. Dhanasobhon, Samita, Michael D. Smith, Rahul Telang. 2008. Converting Pirates Without Cannibalizing Purchasers: The Impact of Digital Distribution on Physical Sales and Internet Piracy. *Conference on Information Systems and Technology* (CIST), Washington, DC, October 11-12.

115. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2008. Location, Location, Location: An Analysis of Profitability and Position in Online Advertising Markets. *INFORMS Marketing Science Conference*, Vancouver, British Columbia, Canada, June 12-14.

116. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2008. Location, Location, Location: An Analysis of Profitability and Position in Online Advertising Markets. *Fourth Symposium on Statistical Challenges in eCommerce Research* (SCECR'08), New York, May 18-19.

117. Smith, Michael D. 2008. Experiments in Digital Distribution and their Impact on Physical Sales and Internet Piracy. *Mini-Conference on Marketing and Innovation*, Lally School of Management and Technology, Rensselaer Polytechnic Institute, Albany, New York, May 2-3.

118. Smith, Michael D., Rahul Telang. 2008. Piracy or Promotion? The Impact of the Broadband Internet Penetration on DVD Sales. *Winter Conference on Business Intelligence*, David Eccles School of Business, University of Utah, Salt Lake City, Utah, March 20-22.

119. Agarwal, Ashish, Kartik Hosanagar, Michael D. Smith. 2007. Location, Location, Location: An Analysis of Profitability and Position in Online Advertising Markets. *Workshop on Information Systems and Economics* (WISE), Montreal, Quebec, Canada, December 8-9.

120. Kemerer, Chris, Charles Liu, Michael D. Smith, Sandra Slaughter. 2007. Network Effects in the Flash Memory Market: A Preliminary Analysis. *Workshop on Information Systems and Economics* (WISE), Montreal, Quebec, Canada, December 8-9.

121. Smith, Michael D., Rahul Telang. 2007. Piracy or Promotion? The Impact of the Broadband Internet Penetration on DVD Sales. *INFORMS Annual Meeting*, Seattle, Washington, November 4-7.

122. Chen, Pei-yu, Samita Dhanasobhon, Michael D. Smith. 2007. All Reviews are Not Created Equal: The Disaggregate Impact of Reviews and Reviewers at Amazon.com. *INFORMS Annual Meeting*, Seattle, Washington, November 4-7.

123. Smith, Michael D., Rahul Telang. 2007. Piracy or Promotion? The Impact of the Broadband Internet Penetration on DVD Sales. *Third Symposium on Statistical Challenges in eCommerce Research* (SCECR'07), Stamford, Connecticut, May 18-19.

124. Smith, Michael D., Rahul Telang. 2007. Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Internet Piracy. *International Industrial Organization Conference* (IIOC), Savannah, GA, April 14-15.

125. Smith, Michael D., Rahul Telang. 2007. Piracy or Promotion? The Impact of the Broadband Internet Penetration on DVD Sales. *Economics of Information Systems Workshop*, Department of Decision and Information Sciences, Warrington College of Business, University of Florida, Gainesville, FL, January 26-27.

126. "The Impact of New Technologies and New Distribution Channels on Media Sales and Media Piracy," *Workshop on Information Security Economics*, Center for Discrete Mathematics & Theoretical Computer Science (DIMACS), Rutgers University, January 18-19, 2007.

127. Smith, Michael D., Rahul Telang. 2006. Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Internet Piracy. *Workshop on Information Systems and Economics* (WISE), Chicago, IL, December 9-10.

128. Smith, Michael D., Rahul Telang. 2006. Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Internet Piracy. *INFORMS Annual Meeting*, Pittsburgh, PA, November 5-8.

129. Smith, Michael D., Rahul Telang. 2006. An Analysis of Bittorrent Peer-to-Peer Networks and Internet Movie Piracy. *INFORMS Annual Meeting*, Pittsburgh, PA, November 5-8.

130. Smith, Michael D., Rahul Telang. 2006. Internet Exchanges for Information Goods. *INFORMS Annual Meeting*, Pittsburgh, PA, November 5-8.

131. Krishnan, Ramayya, Michael D. Smith, Rahul Telang. 2006. Peer-to-Peer Technologies: A Research-Oriented Introduction. *INFORMS Annual Meeting*, Pittsburgh, PA, November 5-8.

132. Kemerer, Chris, Charles Liu, Michael D. Smith. 2006. Winners-Take-Some: The Impact of Conversion Technologies on Network Effects in Digital Goods Markets. *INFORMS Annual Meeting*, Pittsburgh, PA, November 5-8.

133. Smith, Michael D., Rahul Telang. 2006. Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Internet Piracy. *Telecommunications Policy Research Conference* (TPRC), Arlington, VA, September 29-October 1.

134. Smith, Michael D., Rahul Telang. 2006. Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy. *INFORMS Marketing Science Conference*, Pittsburgh, PA, June 8-10.

135. Smith, Michael D., Rahul Telang. 2006. Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy. *Second Annual Statistical Challenges in Electronic Commerce Research Symposium*, Carlson School of Management, University of Minnesota, Minneapolis, MN, May 22-23.

136. Smith, Michael D., Rahul Telang. 2006. Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy. *Economics of Information Systems Workshop*, Department of Decision and Information Sciences, Warrington College of Business, University of Florida, Gainesville, FL, February 10-11.

137. Tang, Zhulei, Alan Montgomery, Michael D. Smith. 2005. The Impact of Shopbot Use on Prices and Price Dispersion: Evidence from Disaggregate Data. *Workshop on Information Systems and Economics* (WISE), Irvine, CA, December 9-10.

138. Ghose, Anindya, Michael D. Smith, Rahul Telang. 2005. Internet Exchanges for Used Books: Welfare Implications and Policy Issues. *INFORMS Annual Meeting*, San Francisco, CA, November 13-15.

139. Smith, Michael D. 2005. Peer-to-Peer Business Models and Implications for Markets. *Economics of Digital Business Models*, Paris, France, June 17-18.

140. Tang, Zhulei, Yu Hu, Michael D. Smith. 2005. Protecting Online Privacy: Self Regulation, Mandatory Standards, or Caveat Emptor. *Workshop on the Economics of Information Security* (WEIS), Boston, MA, June 2-3.

141. Ghose, Anindya, Michael D. Smith, Rahul Telang. 2005. Internet Exchanges for Used Books: Welfare Implications and Policy Issues. *Statistical Challenges in Ecommerce*, College Park, MD, May 22-23.

142. Ghose, Anindya, Michael D. Smith, Rahul Telang. 2005. Internet Exchanges for Used Books: Welfare Implications and Policy Issues. *International Industrial Organization Conference* (IIOC), Atlanta, GA, April 8-9.

143. Clay, Karen, Astrid A. Dick, Michael D. Smith. 2005. The Effect of Increased Search Costs on Internet-Enabled Arbitrage: Evidence from the International Textbook Market. *International Industrial Organization Conference* (IIOC), Atlanta, GA, April 8-9.

144. Asvanund, Atip, Ramayya Krishnan, Michael D. Smith, Rahul Telang. 2004. Intelligent Club Management in Peer-to-Peer Music Sharing Networks. *NET Institute Conference on Network Economics*, New York, NY, April 1.

145. Smith, Michael D., Rahul Telang. 2004. Internet Exchanges for Used Goods: A Comparison of Digital and Analog Information Goods. *Workshop on Information Systems and Economics* (WISE), Washington D.C., December 11-12.

146. Ghose, Anindya, Michael D. Smith, Rahul Telang. 2004. Internet Exchanges for Used Books: An Empirical Analysis of Welfare Implications and Policy Issues. *INFORMS Annual Meeting*, Denver, Colorado, October 24-27.

147. Ghose, Anindya, Michael D. Smith, Rahul Telang. 2004. Internet Exchanges for Used Books: An Empirical Analysis of Welfare Implications and Policy Issues. *MISRC/CRITO Symposium on the Digital Divide*, Minneapolis, Minnesota, August 28-29.

148. Krishnan, Ramayya, Michael D. Smith, Zhulei Tang, Rahul Telang. 2003. The Virtual Commons: Why Free-Riding Can Be Tolerated in File Sharing Networks. *Workshop on Information Systems and Economics* (WISE), Seattle, Washington, December 13-14.

149. Hu, Yu, Michael D. Smith, Zhulei Tang. 2003. Protecting Online Privacy: Self Regulation, Mandatory Standards, or Caveat Emptor. *Workshop on Information Systems and Economics* (WISE), Seattle, Washington, December 13-14.

150. Asvanund, Atip, Michael D. Smith, Rahul Telang. 2003. "Intelligent Club Management in Peer-to-Peer Music Sharing Networks." *Workshop on Information Technology and Systems* (WITS), Seattle, WA, December 13-14.

151. Hosanagar, Kartik, John Chuang, Michael D. Smith. 2003. Optimal Pricing of Content Delivery Network Services. *Workshop on Information Technology and Systems* (WITS), Seattle, WA, December 13-14.

152. Brynjolfsson, Erik, Astrid A. Dick, Michael D. Smith. 2003. "Search and Product Differentiation at an Internet Shopbot." *Quantitative Marketing and Economics Conference* (QME), Chicago, IL, October 24-25.

153. Brynjolfsson, Erik, Alan Montgomery, Michael D. Smith. 2003. "'An Empirical Study of Consumer Choice Behavior at an Internet Shopbot." *Marketing Science Conference*, College Park, MD, June 12-15.

154. Asvanund, Atip, Ramayya Krishnan, Michael D. Smith, Rahul Telang. 2003. "Intelligent Club Management in Peer-to-Peer Music Sharing Networks." *Workshop on the Economics of Peer-to-Peer Systems*, Berkeley, CA, June 5-6.

155. Brynjolfsson, Erik, Yu Hu, Michael D. Smith. 2003. "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety." *International Industrial Organization Conference* (IIOC), Boston, MA, April 4-5.

156. Brynjolfsson, Erik, Yu Hu, Michael D. Smith. 2003. "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety." Firm Behavior and the Internet Economy, *Allied Social Science Association / American Economic Association* (ASSA/AEA), Washington, D.C., January 3-5.

157. Clay, Karen, Stanley Ouyang, Michael D. Smith, Eric Wolff. 2003. "Leader-Follower Behavior on the Web: Evidence from Online Bookstores." Firm Behavior and the Internet Economy, *Allied Social Science Association / American Economic Association* (ASSA/AEA), Washington, D.C., January 3-5.

158. Clay, Karen, Stanley Ouyang, Michael D. Smith, Eric Wolff. 2002. "Leader-Follower Behavior on the Web: Evidence from Online Bookstores." *Workshop on Information Systems and Economics* (WISE), Barcelona, Spain, December 12-14.

159. Montgomery, Alan, Michael Smith. 2002. "The Profitability of Shopbot Design." *Marketing Science Conference*, Edmonton, Alberta, Canada, June 28-30.

160. Smith, Michael. 2002. "Structure and Competition in Electronic Markets." *American Marketing Association* (AMA), Winter Educators Conference, Special Session on Doctoral Dissertation Research in Electronic Commerce, Austin, Texas, February 22-25.

161. Brynjolfsson, Erik, Yu Hu, Michael Smith. 2001. "Consumer Surplus in the Digital Economy: Estimating the Value of Access to New Goods Enabled by Electronic Markets." *Workshop on Information Systems and Economics* (WISE), New Orleans, Louisiana; December 14-15.

162. Smith, Michael. 2001. "Toward an Understanding of the Impact of Shopbots on Electronic Markets." Marketing Sciences Institute Conference on Marketing to and Serving Customers Through the Internet, Boca Raton, Florida, December 6-7.
163. Clay, Karen, Michael Smith, Eric Wolff. 2001. "Lead, Follow, or Go Your Own Way: Empirical Evidence Against Leader-Follower Behavior in Electronic Markets." *Telecommunications Policy Research Conference, Alexandria* (TPRC), Virginia, October 27-29.
164. Asvanund, Atip, Karen Clay, Ramayya Krishnan, Michael Smith. 2001. "Bigger May Not Be Better: An Empirical Analysis of Optimal Membership Rules in Peer-to-Peer Networks." *Telecommunications Policy Research Conference* (TPRC), Alexandria, Virginia, October 27-29.
165. Smith, Michael. 2001. "Search and Transaction Costs on the Internet." University of California at Berkeley Invitational Choice Symposium, Monterey, California, June 1-5.
166. Smith, Michael, Erik Brynjolfsson. 2001. "Customer Decision-making at an Internet Shopbot," National Bureau of Economic Research (NBER), Program on Electronic Commerce, Bodega Bay, California, January 26-27.
167. Smith, Michael. 2000. "The Law of One Price? Price Dispersion and Price Matching in Electronic Markets." *Workshop on Information Systems and Economics* (WISE), Brisbane, Australia; December 14-15.
168. Brynjolfsson, Erik, Michael Smith. 1999. "The Great Equalizer? The Role of Shopbots in Electronic Markets." *Workshop on Information Systems and Economics* (WISE), Charlotte, North Carolina; December 11-12.
169. Brynjolfsson, Erik, Michael Smith. 1999. "Frictionless Commerce? A Comparison of Internet and Conventional Retailers," 1999 *Computing in Economics and Finance* (CEF) Conference; Boston, Massachusetts; June 24-26.
170. Brynjolfsson, Erik, Michael Smith. 1998. "Internet Market Efficiency: Fact or Friction?" *Workshop on Information Systems and Economics* (WISE), New York, New York; December 11-12. (Best Student Presentation Award)

INVITED ORAL PRESENTATIONS

1. "The Abundant University: Remaking Higher Education for a Digital World," iPeople Strategy Summit, July 1, 2024.
2. "In Pursuit of Equity: Redesigning Higher Education for a Digital World," Co-Organizer and Panelist, ASU + GSV Summit, San Diego, California, April 14-17, 2024.
3. "The Abundant University: Remaking Higher Education for a Digital World," 2024 Philip E. Frandson Award for Literature Recipient Lecture, Online and Professional Education Association annual conference, Boston, Massachusetts, March 26-28, 2024.
4. "The Abundant University: Remaking Higher Education for a Digital World," Lehigh University, User Designed Inquiry Symposium, March 20, 2024.
5. "Online Education from the University's Perspective," Learners First: Higher Education Online by Design, Duet Student Center, Boston, Massachusetts, February 28, 2024.
6. "The Abundant University: Remaking Higher Education for a Digital World," University of Maryland, R.H. Smith School of Business, October 30, 2023.
7. "The Abundant University: Remaking Higher Education for a Digital World," Plenary Keynote, NASPAA Conference, Pittsburgh, Pennsylvania, October 12, 2023.
8. "The Abundant University: Remaking Higher Education for a Digital World," George Washington University, Institute of Public Policy, Non-degree Credentials Research Network, October 5, 2023.

9. "The Abundant University: Remaking Higher Education for a Digital World," Georgetown University, October 5, 2023.
10. "The Abundant University: Remaking Higher Education for a Digital World," Talks @ Google, September 19, 2023. (https://www.youtube.com/watch?v=YYtkyEnUs88)
11. "What Does Management Theory Say About The Future of Higher Education?" Plenary Keynote, Academy of Management, Management Education and Development Division, Boston, Massachusetts, August 7, 2023.
12. "Digital Transformation and Mission-Based Leadership," Executive Session, Salesforce Education Summit, Dallas, Texas, April 11, 2023.
13. "Did Shutting Down Backpage and Craigslist Increase Violence Against Women?" National Center on Sexual Exploitation, Research Talk, March 3, 2023.
14. "The Abundant University: Remaking Higher Education for a Digital World," University of California at Irvine, Center for Digital Transformation, February 7, 2023.
15. "Student Debt & the Future of Higher Education," Panelist, Heinz College Webinar, November 18, 2022.
16. "The Abundant University: Remaking Higher Education for a Digital World," Gonzaga University, November 9, 2022.
17. "Can Higher Education Fix Itself?", Panelist, Carnegie Mellon University, Hall of States Building, September 27, 2022.
18. "Digital Transformation and Mission-Based Leadership," University of California at Irvine, Digital Leadership Speaker Series, September 20, 2022.
19. "The Impact of Site Blocking: Evidence from the UK," Hudson Institute Roundtable, Challenges and Opportunities in the Creative Industries: The Good, The Bad, and The Ugly, Washington DC, May 6, 2022.
20. "The Abundant University: Remaking Higher Education for a Digital World," Virtual Digital Economy Seminar, March 10, 2022.
21. "The Abundant University: Remaking Higher Education for a Digital World," MIS Workshop, University of British Columbia, Sauder School of Business, February 18, 2022.
22. "Technological Disruption in Arts, Entertainment, and Education," INFOcon 2021, October 20, 2021.
23. "Copyright Protection in the Digital Age," Panelist, Hudson Institute, September 24, 2021. (https://www.hudson.org/events/2009-virtual-event-copyright-protection-in-the-digital-age92021)
24. "Media Industry Winners, Losers, and Policy by 2025," Moderator, Technology Policy Institute, Aspen Forum, August 16, 2021.
25. "The Abundant University: Remaking Higher Education for a Digital World," Emory University, March 19, 2021.
26. "The Abundant University: Remaking Higher Education for a Digital World," Keynote, 38th Academic Chairpersons Conference, February 3, 2021.
27. "The Abundant University: Remaking Higher Education for a Digital World," McGill University Bensadoun School of Retail Management, Retail Thought Leader Seminar Series, November 13, 2020.
28. "The Abundant University: Remaking Higher Education for a Digital World," Boston University, Questrom School of Business, The Boston Digital Leadership Forum, October 23, 2020.
29. "The Abundant University: Remaking Higher Education for a Digital World," Michigan State University, Eli Broad College of Business, Accounting and Information Systems Seminar, October 16, 2020.
30. "The Abundant University: Remaking Higher Education for a Digital World," University of Texas at Austin, McCombs School of Business, Information Risk and Operations Management Seminar, October 9, 2020.

31. Intersect@CMU 2020: COVID-19 + Education Panel Discussion, Moderator, December 2, 2020.
32. "The Abundant University: Remaking Higher Education for a Digital World," University of Minnesota, Carlson School of Management, Information and Decision Sciences Seminar, September 25, 2020.
33. "The Abundant University: Remaking Higher Education for a Digital World," Harvard Business School, Digital Initiative Seminar Series, September 23, 2020.
34. "The Abundant University: Remaking Higher Education for a Digital World," University of Southern California, Marshall School of Business, Data Sciences and Operations Seminar Series, September 18, 2020.
35. "Copyright Law in Foreign Jurisdictions: How are other countries handling digital piracy?" Testimony before the Senate Judiciary Committee, Subcommittee on Intellectual Property, March 10, 2020. (https://www.judiciary.senate.gov/meetings/copyright-law-in-foreign-jurisdictions-how-are-other-countries-handling-digital-piracy)
36. "The Future of Creativity," CMU Alumni Association Event, Los Angeles, California, January 30, 2020.
37. "Big Data and the Future of Education," University of Pittsburgh, School Superintendent's Conference, Pittsburgh, Pennsylvania, April 12, 2020.
38. "Digital Piracy: Industry Harm, Consumer Harm, and Law Enforcement Effectiveness," Keynote Address, Digital Piracy Summit, *National Intellectual Property Rights Coordination Center*, Washington, D.C., December 13, 2019.
39. "The Fight Against Online Sex Abuse and Sex Trafficking," Plenary Keynote, 2019 Conference on Artificial Intelligence, Machine Learning, and Business Analytics, Temple University, Philadelphia, Pennsylvania, December 12, 2019.
40. "Breaking Through the Clutter: Capturing Attention in a Demand Economy," Panelist, Entertainment Analytics Conference, Marina Del Rey, California, August 1, 2019.
41. "What is the Future of Entertainment? Streaming Innovation: New Outlets, New Threats," Panelist, Technology Policy Institute, Aspen Forum, August 19, 2019.
42. "Big Data and the Future of Entertainment," Sony Music Nashville, Leadership Offsite Conference, Nashville, Tennessee, December 13, 2018.
43. "Streaming, Sharing, Stealing: Big Data and the Future of Entertainment," Turner Broadcasting, Atlanta, Georgia, November 28, 2018.
44. "Big Data and the Future of Entertainment," Sony Music Global Managing Directors Conference, New York, September 14, 2018.
45. Keynote Talk, "Big Data and the Future of Entertainment," Fifth Korea Cultural Contents Forum, September 19, 2018.
46. Discussant, "Streaming Video: Meet the Pirates," Sarah Oh, Scott Wallsten, Technology Policy Institute, Aspen Forum, Aspen, Colorado, August 21, 2018.
47. "Trust in Storytelling: Can Content Creators Ever Win?" Panelist, Society of Motion Picture and Television Engineers, Entertainment Technology @ 2018 Conference, Sunnyvale, California, June 13, 2018.
48. "The Impact of Piracy Notice Sending on Consumer Behavior for Entertainment: Evidence from a Randomized Field Experiment in the UK," Facebook Tech Talk, Palo Alto, CA, May 11, 2018.
49. "The Economics of Entertainment Digitization," NBER Digitization Tutorial, Stanford University, Palo Alto, California, February 28-March 1, 2018.
50. "The Economics of Intellectual Property and Consumer Behavior," Loyola Law School IP and Information Law Speaker Series, Los Angeles California, February 26, 2018.
51. "Piracy, Anti-Piracy and Consumer Behavior," Recording Industry Association of America, Board Retreat, November 1, 2017.

52. "Data Analytics and Consumer Behavior," ComcastLabs, PHLAI: Machine Learning Conference, Business Intelligence Keynote, Philadelphia, Pennsylvania, August 15, 2017.
53. "Big Data and the Future of Entertainment," Future of Technology Conference, Yale University Law School, New Haven, Connecticut, July 28 and August 5, 2017.
54. "Anti-Piracy and Consumer Behavior: What We Know So Far," Microsoft Media and Entertainment Day, New York, New York, July 25, 2017.
55. "Anti-Piracy and Consumer Behavior: What We Know So Far," Center for the Protection of Intellectual Property, Fourth Annual Summer Institute, Beaver Creek, Colorado, July 11-13, 2017.
56. "Is Big Data Killing Creativity?" Carnegie Mellon University 3 Big Ideas, Microsoft Impact Hub, Seattle, Washington, June 28, 2017.
57. "Digital Transformation and the Entertainment Industry," IT Teaching Workshop: Core Track, University of California at Irvine, May 20, 2017.
58. "Bumpy Seas: Leveraging Disruption in the Video Market," Panel Discussion, American Cable Association 24th Annual Summit, Washington, D.C., March 28, 2017.
59. "The Future of Work: Technological Innovation, Economic Disruption, and Human Dignity." Ohio State University Center for Ethics and Human Values, Columbus Ohio, March 7, 2017.
60. "Piracy and Film: 5 Myths and the Truth," Keynote Address, Film & TV Näringsdagen, Stockholm, Sweden, February 8, 2017.
61. "Big Data, Content Bubbles, and the Future of Entertainment," Redburn Media Conference, London, UK, February 1, 2017.
62. "Big Data and the Future of Entertainment," Boston Consulting Group, New York, New York, January 24, 2017.
63. "Technology, Copyright, and the Creative Industry," Copyright and Technology Conference, New York, New York, January 24, 2017.
64. "Big Data and the Future of Entertainment," NBC Universal, Los Angeles, California, January 20, 2017.
65. "Big Data and the Future of Entertainment," Amazon Studios, Los Angeles, California, January 18, 2017.
66. "Streaming, Sharing, Stealing: Big Data and the Future of Entertainment," Gary's Book Club, Consumer Electronics Show, Las Vegas, Nevada, January 6, 2017.
67. "IT and Strategy: Riding the Waves of Disruption," Evanta CIO Executive Summit, Pittsburgh, Pennsylvania, December 7, 2016.
68. "Streaming, Sharing, Stealing: Big Data and the Future of Entertainment," Live Talks LA, Los Angeles, California, October 20, 2016.
69. "Streaming, Sharing, Stealing: Big Data and the Future of Entertainment," Keynote, Hollywood IT Society Fall Conference, Los Angeles, California, October 19, 2016.
70. "Big Data and the Future of Entertainment," Tech Talk, Walt Disney Studios, Burbank, California, October 17, 2016.
71. "Streaming, Sharing, Stealing: Big Data and the Future of Entertainment," Authors@Google Talk, Mountain View, California, September 21, 2016.
72. "Is Big Data Killing Creativity?" TEDxHarvard Talk, Cambridge, Massachusetts, September 18, 2016.
73. "The Future of Notice and Takedown: What's Next?" Panel Moderator, MONDO NYC, Kimmel Center, Rosenthal Pavilion, New York City, September 15, 2016.
74. "Music Licensing: Ideas for Reform," Panelist, Technology Policy Institute, Aspen Forum, Aspen, Colorado, August 22, 2016.

75. "The Netflix Effect: How Technology is Changing the Face of Entertainment," Salesforce Rincon Center, San Francisco, California, June 9, 2016.

76. "Big Data and The Future of Entertainment," Three Big Ideas from Carnegie Mellon University, LinkedIn, Sunnyvale, California, June 8, 2016.

77. "Streaming, Sharing, Stealing: Big Data and the Future of Entertainment," Sony Pictures Entertainment, June 7, 2016.

78. "Customer Data and the Future of Entertainment," Cable Academy 2016, Broadband Cable Association of Pennsylvania, Harrisburg, Pennsylvania, April 20, 2016.

79. "Do Search Engines Influence Media Piracy? Evidence from a Randomized Field Study," New York University, Stern School of Business, Marketing Seminar Series, February 2, 2016.

80. "Piracy and Film: 5 Myths and the Truth," Data Keynote Address, Sundance Film Festival, Artist Services Workshop, Park City, Utah, January 25, 2016.

81. "Carrots and Sticks: Empirical Evidence on Strategies for Competing with Piracy," University of Arizona, Eller College of Management, MIS Speaker's Series, November 6, 2015.

82. "Creative Destruction in the Creative Industries: How Technology is Changing Content Business Models," Panelist, Technology Policy Institute Aspen Forum, August 18, 2015. (C-SPAN coverage: http://www.c-span.org/video/?327626-4/discussion-technology-creative-industries.)

83. "Music Licensing: Moving to the Digital Era," Panel Moderator, Technology Policy Institute Aspen Forum, August 17, 2015.

84. "Copyright Protection: Government vs. Voluntary Arrangements," Panel Moderator, Technology Policy Institute Aspen Forum, August 17-19, 2014.

85. "The Evolving Media Landscape: What do the Data Show?" Panel Discussion, Technology Policy Institute, Washington D.C., May 8, 2014. (http://www.techpolicyinstitute.org/events/show/115.html)

86. "Education, Enforcement, and the Economics of Piracy and Counterfeiting," Panelist, Congressional International Anti-Piracy Caucus, Rayburn House Office Building, Washington, D.C., April 28, 2014.

87. "Do Search Engines Influence Media Piracy? Evidence from a Randomized Field Study," University of California and San Diego, Rady School of Management, Innovation, Technology and Operations Seminar Series, La Jolla, California, March 14, 2014.

88. "Gone in 60 Seconds: The Impact of the Megaupload Shutdown on Movie Sales," MIT Initiative on the Digital Economy Seminar, Center for Digital Business, MIT Sloan School, Cambridge, MA, November 6, 2013.

89. "Measuring the Impact of Piracy and the Effectiveness of Anti-Piracy Enforcement," Fourth Anti-Piracy and Content Protection Summit, Los Angeles, California, June 26, 2013.

90. "Piracy, Regulation, and Digital Media," Office of the Intellectual Property Coordinator, Executive Office of the President, Eisenhower Executive Office Building, Washington, DC, April 22, 2013.

91. "Competing With Free: How Digitization, Piracy, and Big Data Are Disrupting the Movie Industry," Computer Science Department Colloquium, Calvin College, Grand Rapids, Michigan, March 28, 2013.

92. "Gone in 60 Seconds: The Impact of the Megaupload Shutdown on Movie Sales," Operations and Information Management Research Seminar, The Wharton School, University of Pennsylvania, Philadelphia, Pennsylvania, March 19, 2013.

93. "Competing With Free: How Piracy Impacts Sales and Strategies to Fight It," Digital Book World Conference, New York, New York, January 15, 2013.

94. "The Economics of Copyright Enforcement in a Digital Age," Variety Content Protection Summit, Los Angeles, California, December 6, 2012.

95. Panelist, "Comparing International Anti-Piracy Strategies," National Association of Recording Merchandisers, Entertainment & Technology Law Conference Series, New York, New York, September 13, 2012.

96. Panelist, "Copyright and Piracy after SOPA/PIPA: Finding Common Ground," Technology Policy Institute, Aspen Forum, Aspen, Colorado, August 19-21, 2012.

97. "The Effect of Graduated Response Anti-Piracy Laws on Music Sales: Evidence from an Event Study in France," Research Seminar in Information Technology and Organizations: Economic Perspectives, Sloan School, Massachusetts Institute of Technology, Cambridge, MA, April 4, 2012.

98. Panelist, "The Meaning of Work, the Universe, and Everything: Humanist, Agnostic, and Christian Professors Discuss the Purpose of Work, Veritas Forum, Carnegie Mellon University, Pittsburgh, PA, February 25, 2012. (Video available here http://www.veritas.org/cmu)

99. Panelist, "Entertainment in the Cloud," Congressional Internet Caucus Advisory Committee, State of the Net Conference, Washington DC, January 18-19, 2012. (Video available here http://www.youtube.com/watch?v=aYzXhFet1K8)

100. "The Impact of Ebook Distribution on Print Sales: Analysis of a Natural Experiment," Information Technology and Management, Distinguished Lecture Series, Georgia Institute of Technology, College of Management, Atlanta, GA, January 13, 2012.

101. "Information Discovery and the Long Tail of Motion Picture Content." W.P. Carey School of Business, Arizona State University, Tempe, Arizona, April 22, 2011.

102. "Channels and Conflict: Measuring the Impact of Digital Distribution Channels on Demand for Physical and Pirated Content." Distinguished Speaker Seminar Series, Desautels Faculty of Management, McGill University, Montreal, Quebec, Canada, March 3, 2011.

103. "Marketing Challenges in the Presence of Digital Distribution Channels." The Thriving in the Digital Age Conference, Undergraduate Marketing Organization, American Marketing Association Regional Conference, Pittsburgh, PA, October 9, 2010.

104. "Channels and Conflict: Consumer Response to Digital Distribution Channels." Research Seminar, Yahoo, Mountain View, CA, August 16, 2010.

105. "Channels and Conflict: Consumer Response to Digital Distribution Channels." Tech Talk, Google, Mountain View, CA, August 16, 2010. (Video available from http://www.youtube.com/watch?v=Y4VsTm3TPj4)

106. "Using Natural Experiments to Identify Cross-Channel Substitution Patterns in Digital Media." Research Seminar, London Business School, London, UK, June 21, 2010.

107. "Competing with Free: The Impact of Digital Distribution Channels on Media Consumption." Center for Digital Business Research Seminar, MIT, Cambridge, Massachusetts, April 26, 2010.

108. "Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy." Applied Microeconomics Seminar, Cornell University, Ithaca, New York, March 17, 2010.

109. "Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy." Research Seminar, Department of Information, Risk, and Operations Management, McCombs School of Business, University of Texas at Austin, Austin, Texas, January 28, 2010.

110. "Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy." Research Seminar, Department of Management Information Systems, Fox School of Business, Temple University, Philadelphia, Pennsylvania, December 4, 2009.

111. "Competing With Free: Can Digital Distribution Reduce Piracy?" University of Southern California, Marshall School, Institute for Communication Technology Management, Los Angeles, California, November 20, 2009.

112. "Competing With Free: Can Digital Distribution Reduce Piracy?" BayTSP Online Trends and Insight Conference, Los Gatos, California, October 15, 2009.

113. "Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy." Research Seminar, Department of Decision, Operations, and Information Technology, Robert H. Smith School of Business, University of Maryland, College Park, Maryland, October 9, 2009.

114. "Converting Pirates without Cannibalizing Purchasers: The Impact of New Digital Distribution Channels on Internet Piracy." Research Seminar, Information Operations and Management Department, Marshall School of Business, University of Southern California, Los Angeles, California, July 10, 2009.

115. "A Discussion of 'Taller Profiles and/or Longer Tails,' by Mark McCabe and Christopher Snyder." *7th Annual ZEW Conference on the Economics of Information and Communications Technologies*, Mannheim, Germany, July 3-4, 2009.

116. "A Discussion of 'Intellectual Property Rights Enforcement in Imperfect Markets,' by Jiahua Che, Larry Qiu, and Wen Zhou." *International Industrial Organization Conference* (IIOC), Boston, Massachusetts, April 5, 2009.

117. "Preventing Piracy in a Multi-Platform World," Panelist, Third Annual Future Television Show Summit, New York, NY, January 21-22, 2009.

118. "Competing with Free: The Impact of Movie Broadcasts on DVD sales and Internet Piracy," Research Seminar, Carlson School of Management, University of Minnesota, Minneapolis, Minnesota, April 18, 2008.

119. "A Discussion of 'Estimating Menu Costs in Electronic Markets,' by Anindya Ghose and Bin Gu." *International Conference on Information Systems* (ICIS), Montreal, Quebec, Canada, December 9-12, 2007.

120. "A Discussion of 'Trust and Survival of Service Providers in an eMarket,' 'Servicing the Long Tail: Using Customer Relationship Management Techniques to Manage Service Center Employee Relationships,' 'An Empirical Analysis of Price, Quality, and Incumbency in Online Procurement Auctions.'" Services Research Session. Workshop on the Economics of Information Systems and Economics, Montreal, Quebec, Canada. December 8-9, 2007.

121. "Consumption in the Digital Age," Panelist, The Internet Entertainment Workshop, Motion Picture Association of America, Universal City, CA, September 20, 2007.

122. "Does the Economics of ICT Matter?" Invited Keynote Address, *The Economics of Information and Communications Technologies*, Sciences Economiques et Sociales, Ecole Nationale Superieure des Telecommunications, Paris, France, June 21-22, 2007.

123. "A Discussion of 'Advertising as a Signal in an Internet Auctions Market,' by Jose J. Canals-Cerda." *International Industrial Organization Conference* (IIOC), Savannah, GA, April 14-15, 2007.

124. "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy," Research Colloquium, Department of Information Systems, The Paul Merage School of Business, University of California at Irvine, Irvine, CA, March 15, 2007.

125. "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy," Research Seminar, Marketing and Information Systems Departments, College of Business, University of Illinois at Urbana-Champaign, Champaign, IL, March 9, 2007.

126. "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy," Research Seminar, Department of Information, Risk, and Operations Management, McCombs School of Business, University of Texas at Austin, Austin, TX, February 9, 2007.

127. "A Discussion of Papers in the 'Long Tail' Program Track," *Workshop on Information Systems and Economics* (WISE), Chicago, IL, December 10, 2006.

128. "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy," Thomas J. Burns Research Colloquium, Department of Accounting and Management Information Systems, Fisher College of Business, Ohio State University, Columbus, OH, November 10, 2006.

129. "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy," Information Systems and Operations Management Faculty Research Seminar, School of Business, University of Washington, Seattle, Washington, October 20, 2006.

130. "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy," Information Systems and Operations Management Faculty Research Seminar, University of Texas at Dallas, Dallas, Texas, September 15, 2006.

131. "A Discussion of 'Strategic Sales Management Guided by Economic Regimes,' by W. Ketter, J. Collins, M. Gini, A. Gupta and P. Schrater," *Second Annual Statistical Challenges in Electronic Commerce Research Symposium*, Carlson School of Management, University of Minnesota, Minneapolis, MN, May 22-23.

132. "Presentation of 'Digital Transformation' Course Themes and Pedagogy," IT Teaching Conference, Harvard Business School, May 5, 2006.

133. "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy," MIT Research Seminar in IT and Organizations, Massachusetts Institute of Technology, Sloan School of Management, March 15, 2006.

134. "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Piracy," Management Information Systems Department, John and Cheryl Coffin Academic Speaker Series, Krannert School of Management, Purdue University, February 24, 2006.

135. "A Discussion of 'The Sound of Silence in Online Feedback: Estimating Trading Risks in the Presence of Reporting Bias' by Chrysanthos Dellarocas and Charles A. Wood," *Workshop on Information Systems and Economics* (WISE), December 10-11, 2005.

136. "A Discussion of 'Price-formats as Sources of Price Dispersion: A Study of Online and Offline Prices in the Domestic US Airline Market' by Ramnath K. Chellappa, Raymond G. Sin, and S. Siddarth," *Workshop on Information Systems and Economics* (WISE), December 10-11, 2005.

137. "Internet Exchanges for Used Books: Welfare Implications and Policy Issues," Information Systems Department Seminar, Michigan State University, Eli Broad Graduate School of Management, October 7, 2005.

138. "A Discussion of 'Partial Licensing of Product Innovations'," *Economics of Digital Business Models*, Paris, France, June 17-18, 2005.

139. "The Economics of Peer-to-Peer Networks: Analysis and Implications for Regulation," Presentation to Commissioner Pamela Jones Harbour and Staff, Federal Trade Commission, June 15, 2005.

140. "Regulation and Design of Peer-to-Peer Networks." Research Seminar. Federal Trade Commission (FTC), Washington, DC, May 20, 2005.

141. "A Discussion of 'Vettes and Lemons on eBay' by Christopher Adams, Laura Hosken, and Peter Newberry." *International Industrial Organization Conference* (IIOC), Atlanta, GA, April 8-9, 2005.

142. "The Future of Peer-to-Peer Technology: Effects on Efficiency and Competition," Panelist, Panel on Peer-to-Peer File Sharing Technology: Consumer Protection and Competition Issues, Federal Trade Commission (FTC), Washington, D.C., December 15, 2004.

143. "A Discussion of 'On the Formation of Peer-to-Peer Networks: Self-Organized Sharing, Groups, and Links'," *International Conference on Information Systems* (ICIS), Washington, DC, December 12-15, 2004.

144. "A Discussion of 'Product Information Availability in the Internet: Implications for the Structure of Markets with Differentiated Products'," *Workshop on Information Systems and Economics* (WISE), College Park, MD, December 11, 2004.

145. "Internet Exchanges for Used Books: Welfare Implications and Policy Issues," Economics Department Seminar, Indiana University, Kelly School of Business, December 10, 2004.

146. "Intelligent Club Management in Peer-to-Peer Music Sharing Networks," Information Systems Department Seminar, University of Connecticut, Storrs, CT, November 5, 2004.
147. "Intelligent Club Management in Peer-to-Peer Music Sharing Networks," Information Systems Department Seminar, Stern School of Management, New York University, September 9, 2004.
148. "Search Costs in Electronic Markets: Research Questions and Analysis," Research Seminar: Information Technology and Organizations, MIT Sloan School of Management, February 19, 2004.
149. "Search and Product Differentiation at an Internet Shopbot," Economics Department Seminar, University of Delaware, Newark, DE, October 28, 2003.
150. "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety," Information Systems Seminar, University of California at Irvine, Irvine, CA, May 9, 2003.
151. "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety," Department of Economics, University of Arizona, Tucson, AZ, May 5, 2003.
152. "An Empirical Analysis of Network Externalities in P2P Music-Sharing Networks," Laboratory for Telecommunications Science Seminar, University of Maryland Institute for Advanced Computer Studies, University of Maryland, College Park, MD, November 21, 2002.
153. "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety," Information Technology Seminar, University of Maryland, College Park, MD, November 20, 2002.
154. "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety," Information Technology Seminar, University of Pittsburgh, Pittsburgh, PA, November 13, 2002.
155. "The Great Equalizer? The Role of Shopbots in Electronic Markets," Microeconomics Seminar, Stanford University, May 30, 2001.
156. "A Discussion of 'Follow the Leader? Strategic Pricing in Electronic Commerce' by Chuck Wood and Rob Kaufman," International Conference on Information Systems (ICIS), Brisbane, Australia, December 11, 2000.
157. "The Great Equalizer? The Role of Shopbots in Electronic Markets," Economics, Law, and Organizations Seminar, University of Chicago, Chicago, IL, October 19, 2000.
158. "The Great Equalizer? The Role of Shopbots in Electronic Markets," National Bureau of Economic Research Program on Electronic Commerce, Cambridge, MA, July 22, 2000.
159. "The Great Equalizer? The Role of Shopbots in Electronic Markets," eBusiness@MIT Sponsor Research Seminar, Cambridge, MA, June 19, 2000.
160. "Information, Intermediaries, and the Nature of Electronic Commerce," Seminar to Executives from Tekes Corporation, Cambridge, MA, June 2, 2000.
161. "Structure and Competition in Electronic Markets," Seminar for Executives of CSK Corporation, Cambridge, MA, June 10, 2000.
162. "Information, Intermediaries, and the Nature of Electronic Commerce," Seminar to Executives from British Telecom Corporation, Cambridge, MA, May 24, 2000.
163. "The Great Equalizer? The Role of Shopbots in Electronic Markets," eBusiness@MIT Seminar, Cambridge, MA, May 10, 2000.
164. "Customer Behavior in Internet Markets," Seminar for Executives of British Telecom Corporation, Cambridge, MA, April 12, 2000.
165. "Frictionless Commerce? An Exploratory Analysis of Internet Pricing Behavior," Productivity Workshop at the National Bureau of Economic Research, Cambridge, MA, March 17, 2000.
166. "The Great Equalizer? The Role of Shopbots in Electronic Markets," Job Talk Presentation, The Wharton School, University of Pennsylvania; Boston University; Stern School of Business, New York University; H. John Heinz III School of Public Policy and Management, Carnegie Mellon University; The University

of Michigan; Graduate School of Business, Stanford University; University of Texas at Austin; University of Maryland; Indiana University, January-March, 2000.

167. "Internet Price Intermediaries and Consumer Choice Behavior," MIT Economics Department, Industrial Organization Seminar, Cambridge, MA, October 23, 1999.
168. "Frictionless Commerce? A Comparison of Internet and Conventional Retailers," Program on Electronic Commerce and Marketing Seminar, Cambridge, MA, May 7, 1999.
169. "Understanding Electronic Commerce," Seminar to Executives from Tekes Corporation, Cambridge, MA, March 22, 1999.
170. "Understanding Electronic Commerce," Seminar to Executives from Goodyear Corporation, Cambridge, MA, March 12, 1999.
171. "Frictionless Commerce? A Comparison of Internet and Conventional Retailers," Charles River Information Technology Group, Cambridge, MA, January 25, 1999.
172. "Electronic Commerce and Retail Competition on the Internet," Alfred A. Berg Fund Presentation, Cambridge, MA, September 17, 1998.

EDITORIAL BOARD MEMBERSHIPS

Senior Editor, Information Systems Research, 2009-2014.

Associate Editor, *MIS Quarterly*, 2008-2010.

Associate Editor, *Management Science,* 2005-2010.

Associate Editor, *Information Systems Research*, 2003-2006.

Associate Editor, *Information Systems Research*, Special Issue on Digital Systems and Competition, 2008.

Editorial Board, *Decision Support Systems*, 2003-Present.

Editorial Board, I/S: A Journal of Law and Policy for the Information Society, 2004-2013.

Associate Editor, *International Conference on Information Systems*, Web-based Information Systems and Applications Track, 2007

Ad Hoc Associate Editor, *Management Science*, 2004-2005.

Associate Editor, *International Conference on Information Systems*, Business Models and Economics Track, 2002.

PROFESSIONAL MEMBERSHIP AND ACTIVITIES

Co-Director, Initiative for Teaching and Education Analytics (iTEA), 2023-Present.

Co-Director, Initiative for Digital Entertainment Analytics (IDEA), 2012-Present.

Adjunct Senior Fellow, Technology Policy Institute, 2013-Present.

Co-Director, iLab Center for Digital Media Research at Carnegie Mellon, 2008-2012.

Research Associate, Center for Marketing Technology and Information, Tepper School of Business, Carnegie Mellon University, 2010-Present.

Program Co-Chair, Workshop on Information Systems and Economics (WISE), December 15-16, 2012.

Participant, The National Academies Board on Science Technology and Economic Policy, Workshop on the Economics Impact of Copyright, June 9, 2011.

Faculty Mentor, 2010 Doctoral Consortium, International Conference on Information Systems, St. Louis, Missouri, December 9-10, 2010.

Session Chair, Social Media, Workshop on Information Systems and Economics, St. Louis, Missouri, December 12, 2010.

NSF Panel Participant, September 2009.

Session Chair, Online Markets, Seventh ZEW Conference on the Economics of Information and Communication Technologies, July 3-4, 2009.

Program Co-Chair, Fifth Symposium on Statistical Challenges in eCommerce Research (SCECR'09), Pittsburgh, May 10-11, 2009.

Session Chair, User Generated Content, *Fourth Symposium on Statistical Challenges in eCommerce Research* (SCECR'08), New York, May 18-19, 2008.

Co-Chair, Social Network Analysis in IS Research Minitrack, *The 2008 Americas Conference on Information Systems (AMCIS),* Toronto, Canada, August 14-17, 2008.

Session Chair, Information Systems and Security, *INFORMS Annual Meeting*, Seattle, Washington, November 4-7, 2007.

Co-Chair, The Peer-to-Peer Paradigm Minitrack, *The 2007 Americas Conference on Information Systems (AMCIS),* Keystone, Colorado, August 9-12, 2007.

Session Chair, Digital and Media Piracy Track, *International Industrial Organization Conference* (IIOC), Savannah, GA, April 14-15, 2007.

Program Co-Chair, Workshop on Information Systems and Economics (WISE), December 8-9, 2006.

Chair, Piracy and Copyright Issues in Markets for Information Goods, Information Systems Society Cluster, *INFORMS Annual Meeting*, Pittsburgh, PA, November 5-8, 2006.

Co-Chair, The Peer-to-Peer Paradigm Minitrack, *The 2006 Americas Conference on Information Systems (AMCIS),* Acapulco, Mexico, August 4-6, 2006.

Participant, Information Technology Case Teaching Workshop, Harvard Business School, Boston, MA, May 5, 2006.

Co-Chair, The Economics of Peer-to-Peer Networks Minitrack, *The 2005 Americas Conference on Information Systems (AMCIS),* Omaha, Nebraska, August 11-15, 2005.

Advisory Board, SSRN Information Systems and Economics Abstracting Journal, 2004-Present.

Advisory Board, Institute for the Study of Information Technology and Society, H. John Heinz III School of Public Policy and Management, Carnegie Mellon University, 2001-Present.

Advisory Board, Electronic Commerce Research Forum, eBusiness@MIT, 2000-Present.

Session Chair, Online Consumer Behavior I, *Workshop on Information Systems and Economics (WISE),* College Park, Maryland, December 11, 2004.

Participant, Information Technology Case Teaching Workshop, Center for Electronic Business and Commerce (CEBC), Stanford University, Palo Alto, CA, March 19, 2004.

Program Committee, Workshop on the Economics of Peer-to-Peer Systems, Berkeley, CA, June 2003.

Session Chair, Incentives in Peer-to-Peer Networks, *Workshop on the Economics of Peer-to-Peer Systems,* Berkeley, CA, June 2003.

Participant, Harvard Business School, Case Method Teaching Seminar, March 2002.

Discussant, *International Conference on Information Systems,* Brisbane, Australia, December 11, 2000.

NSF Panel Participant, November 2000.

Session Chair, Internet Economics II - Electronic Commerce, *Computing in Economics and Finance Conference,* June 1999.

Co-Editor, Electronic Commerce Research Forum, 1999-2000.

Member: Association for Information Systems, American Economics Association, American Marketing Association, INFORMS.

Referee: Management Science, Information Systems Research, MIS Quarterly, Journal of Management Information Systems, Journal of Political Economy, Journal of Industrial Economics, Journal of Business, Journal of Public Policy and Marketing, Journal of the Academy of Marketing Science, Journal of Interactive Marketing, Information Economics and Policy, International Conference on Information Systems, INFORMS Computer Society, California Management Review, Journal of Economic Surveys, The Electronic Commerce Research Journal, B.E. Journals in Economic Analysis and Policy, Empirical Economics, International Review of Economics and Finance, Eastern Economic Journal, Economic Modeling, Information Technology and Management, Austrian Science Fund, Omega the International Journal of Management Science, Hawaii International Conference on Information System Sciences.

DOCTORAL STUDENT COMMITTEES

Helen Zeng, "Sound of Freedom Trilogy: Responding to the Rise in Human Sex Trafficking Facilitated by Digital Platforms," Graduated 2024. (University of California at Davis).

Xiyang Hu, "Empowering High-Stakes Applications Through Human-Centered Machine Learning," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Graduated 2024 (Arizona State University, W.P. Carey School of Business).

Yi Zhang, "Three Essays on the Economics of New Channel Adoptions in the Entertainment Industry," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Graduated 2022 (Columbia University, School of Engineering and Applied Science).

Yangfan Liang, "Three Essays on Consumer Behavior in Technology-Enabled Markets," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Dissertation Chair, Graduated 2022 (Amazon).

Mi Zhou, "Essays on Consumer Behavior in Technology-Enabled Markets," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Dissertation Chair, Graduated 2020 (University of British Columbia, Sauder School of Business).

Uttara Ananthakrishnan, "Essays on Managing Content on Digital Platforms," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Dissertation Co-Chair, Graduated 2018 (University of Washington, Foster School of Business).

Filipa Reis, "Leveraging Upon Large Scale Media and Communications Datasets for Socio-Economic and Policy Analysis," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Graduated 2018 (Universidade Católica, Lisbon).

Jing Gong, "Essays on Technology-Mediated Two-Sided Markets," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Dissertation Chair, Graduated 2016 (Temple University).

Zia Hydari, "Essays on Health Information Technologies," Tepper School of Business, Carnegie Mellon University. Graduated 2014 (University of Pittsburgh, Katz School of Business).

Daegon Cho, "Essays on Information Technology and Market Dynamics: An Analysis of Media, Mobile and Platform Competition," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Graduated 2013 (Pohan University of Science and Technology).

Rajiv Garg, "Essays on Information Economy: An Analysis of Social, Digital, and Mobile Platforms," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Graduated 2013 (University of Texas at Austin).

Yan Huang, "Essays on the Economics of Crowdsourcing and Enterprise Social Media," Heinz College, School of Information Systems and Management, Carnegie Mellon University. Graduated May 2013 (University of Michigan).

Angela Newell, "The Democratic Information Architecture: Government As Nexus." Johnson School of Public Affairs, University of Texas at Austin, Graduated 2011.

Anuj Kumar, "Essays on Technology Enabled Multi-channel Operations," Heinz College, School of Information Systems and Management, Carnegie Mellon University, Graduated 2011 (Warrington College of Business Administration, University of Florida).

Alexandre Mateus, "Copyright Violation on the Internet: Extend and Approaches to Detection and Deterrence," Engineering and Public Policy, Carnegie Mellon University and Instituto Superior Técnico, Lisbon, Portugal, Graduated 2011.

Ashish Agarwal, "Essays on Economics of Technology Markets," Tepper School of Business, Carnegie Mellon University. Graduated 2009 (University of Texas at Austin).

Zhechao (Charles) Liu, "Winners-Take-Some: The Impact of Conversion Technologies on Network Effects in Digital Goods Markets," Katz School of Business, University of Pittsburgh. Graduated 2008 (University of Texas at San Antonio).

Zhulei Tang, "Essays on the Analysis and Design of Efficient Electronic Marketplaces," Dissertation Chair, Tepper School of Business, Carnegie Mellon University. Graduated 2005 (Krannert School of Management, Purdue University).

Anindya Ghose, "The Strategic Impact of Internet Institutions and Secondary Electronic Markets on Firm Performance, Market Structure and Social Welfare: An Analytical and Empirical Framework," Graduate School of Industrial Administration, Carnegie Mellon University. Graduated 2004 (Stern School of Business, New York University).

Neveen Farag Awad, "Bringing the Corner-Store Online: The Challenges and Promises of Online Customer Service," University of Michigan Business School. Graduated 2004 (Wayne State University).

Atip Asvanund, "Peer-to-Peer Networks: User Behavior, Network Effects, and Protocol Extensions," Heinz School, Carnegie Mellon University. Graduated 2004 (TA Orange, Thailand).

Kartik Hosanagar, "Three Essays on the Design of Intermediation Services on the Internet," Heinz School, Carnegie Mellon University. Graduated 2003 (The Wharton School, University of Pennsylvania).

Bonnie Brinton Anderson, "Analysis of Adoption and Usage of Software," Heinz School, Carnegie Mellon University. Graduated 2001 (Marriott School of Business, Brigham Young University).

SERVICE

Faculty Advisor, Media and Entertainment Club, Tepper School of Business, 2021-Present.

Faculty Chair, Information Systems Management Program, 2009-Present.

Member, Provost Search Advisory Committee, 2018.

Member, ISS Sandra A. Slaughter Early Career Award Committee, 2017, 2018.

Member, Carnegie Bosch Institute Research Steering Committee, 2018.

Faculty Sponsor, Media and Entertainment Club, Tepper School of Business, 2017.

Co-Chair, Undergraduate Information Systems Program Committee, 2016-17.

Chair, Dean Evaluation Committee, 2014.

Member, Office of Sponsored Programs / Office of Research Integrity and Compliance Advisory Committee, 2013-2014.

Member, University Libraries Advisory Committee, 2012-Present.

Selection Committee, William W. Cooper Doctoral Dissertation Award in Management Science, 2012.

Booth Judge, Carnegie Mellon Carnival, 2005, 2007, 2009, 2012, 2014.

Judge, Thompson-Reuters Case Competition, March 2012.

Chair, Business Intelligence and Data Analytics Academic Programs Committee, 2011.

Member, Ph.D. Committee, 2003, 2007, 2009-2013.

Member, Institute for the Management of Creative Enterprises Program Committee, 2008-Present.

Ryan Award Selection Committee 2010-2013.

Judge, ComScore Case Competition, March 2011.

Member, Australia Educational Programs Review Committee, 2010-Present.

Faculty Advisor, Student Edited Edition of International Association of Business Communications Newsletter, "Exploring the Benefits of Social Media for Business Development," edited by Emmanouil Kounelakis and Haris Krijestorac, December 2009.

Member, Information Systems Management Program Committee, 2002-2009.

Faculty Host, Heinz Alumni Reception, Pacific Palisades, California, July 12, 2009.

Member, Carnegie Mellon University Non-Tenure Promotion Committee, 2009-Present.

Faculty Advisor, MISM Team, International Case Challenge, 2008.

Member, Heinz College Dean Search Committee, 2008-2009.

Session Chair, "The Internet's 'Long Tail' — Implications of Increased Product Variety for Consumers, Producers, and Creative Artists," Heinz School Reunion, 2005.

Member, MISM Commencement Awards Committee, 2005.

Faculty Advisor, Master of Information Systems Management Program, 2001-2005.

Faculty Advisor, First Year PhD Students, 2002-2004.

Member, Faculty Recruiting Committee, 2002-2003.

Member, Master's Program Policy Committee, 2001-2002.

RESEARCH GRANTS AND AWARDS

Initiative for Digital Entertainment Analytics at Carnegie Mellon University (IDEA@cmu), unrestricted gift from the Motion Picture Association of America to analyze the impact of digitization on the motion picture industry, October 2012-Present.

Charles Koch Foundation Postsecondary Education Research Award, "Higher Education In the Digital Age: A Program of Data-Driven Research and Evidence-Based Policy Recommendations," November 2020.

Block Center for Technology and Society, "Better Videos for Better Education: Improving the Quality of Video Resources for Learning Purposes," May 2019-Present.

Google Research Award for "Promoting Movies in Digital Channels: Impact of Targeted Movie Promotion on Sales and Piracy in Digital Movie Markets" (with Rahul Telang), February 2014.

Google Research Award for "Broken Windows? The Future of International Distribution Windows in a Global Media Market" (with Rahul Telang), June 2011.

Google Research Award for "Estimating The Welfare Gain From Digitization of 'Out-Of-Print' Books" (with Rahul Telang), May 2011.

International Intellectual Property Institute and United States Patent and Trademark Office for "Statistical Analysis of the Impact of Camcording Piracy" (with Rahul Telang), April 2011.

Marketing Science Institute and Wharton Interactive Media Initiative Research Award for "Modeling Multichannel Customer Behavior," (with Anuj Kumar and Rahul Telang), June 2010.

Google WPP Marketing Research Award for "Channels and Conflict: Efficient Marketing Strategies for Digital Distribution Channels," (with Rahul Telang), February 2010.

Yahoo! Faculty Research and Engagement Gift for "Advertising Strategies for Social Networks," (with Nachi Sahoo), November 2009.

Center for the Analysis of Property Rights and Innovation (CAPRI) Research Grant for "The Impact of Digital Music Distribution on Physical Sales and Internet Piracy," (with Brett Danaher and Rahul Telang), March 2009.

Research Grant, Motion Pictures Laboratories Incorporated, "Analysis of Piracy in Online Secondary Markets," (with Rahul Telang), August 2007.

Summer Research Grant, Networks, Electronic Commerce, and Telecommunications (NET) Institute, "Standards Competition in the Presence of Conversion Technology: An Empirical Analysis of the Flash Memory Card Market" (with Charles Liu and Chris Kemerer), June 2007.

Center for the Analysis of Property Rights and Innovation (CAPRI) Research Grant for "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Internet Piracy," (with Rahul Telang), October 2006.

NSF CAREER Award, "Designing Efficient Information Exchanges: A Program for Research and Teaching." NSF Award Number IIS-0448516, $493,748, 2005-2010.

Summer Research Grant, Networks, Electronic Commerce, and Telecommunications (NET) Institute, "Incentives and Protocols for Self-Organizing Interest-Based Peer-to-Peer Networks," (with Rahul Telang), June 2004.

Amazon.com Research Grant, March 2003.

Marketing Science Institute, Research Award #4-1191, "The Profitability of Shopbot Design" (with Alan Montgomery), October 2002.

Carnegie Bosch Institute Faculty Development Grant, October 2001.

Berkman Faculty Development Award, November 2000.

ACADEMIC HONORS AND AWARDS

2024 Phillip E. Frandson Award for Literature for "*The Abundant University: Remaking Higher Education for a Digital World*."

Best Paper Award, Psychology of Technology, The AAAI-21 Workshop on AI For Behavior Change held at the Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI-21) for "Influence via Ethos: On the Persuasive Power of Reputation in Deliberation Online" (with Emaad Manzoor, George Chen, and Dokyun Lee).

2018 Dick Wittink Award for the best paper published in *Quantitative Marketing and Economics* for "Super Returns to Super Bowl Ads?" (with Hal Varian and Seth Stephens-Davidowitz).

2017 Carol and Bruce Mallen Award for Lifetime Published Scholarly Contributions in the Economics of the Motion Pictures Industry.

Best Paper Nominee, 2015 International Conference on Information Systems, A Tangled Web: The Impact of Displaying Fraudulent Reviews on Product Search Engines," with Uttara Ananthakrishnan and Beibei Li.

National Academy of Engineering Frontiers of Engineering Symposium. One of 100 "emerging engineering leaders" selected by the National Academy of Engineering, 2009.

Best Teacher Award. Student-nominated award given at commencement to an instructor in the Master of Information Systems Management and Master of Science in Information Technology programs. Award winner: 2009, 2004.

Interfraternity and Panhellenic Role Model Award, Carnegie Mellon University, 2008.

Best Published Paper Award Runner-Up, Information Systems Research, "Internet Exchanges for Used Books: An Empirical Analysis of Product Cannibalization and Welfare Impact," with Anindya Ghose, and Rahul Telang, 2007.

Heinz Career Development Chair, Carnegie Mellon University, 2006-2009.

Best Paper Award Nominee, 2004 International Conference on Information Systems (ICIS), "Price Elasticities and Social Welfare in Secondary Electronic Markets," with Anindya Ghose and Rahul Telang.

Best Paper Award Runner-Up, The 37th Hawaii International Conference on System Sciences (HICSS-37), "The Virtual Commons: Why Free-Riding Can Be Tolerated in File Sharing Networks" (with Ramayya Krishnan, Zhulei Tang, and Rahul Telang), January 2004.

Best Paper Award Runner-Up, International Conference on Information Systems (ICIS), Barcelona, Spain, "An Empirical Analysis of Network Externalities in Peer-To-Peer Music Sharing Networks" (with Atip Asvanund, Karen Clay, and Ramayya Krishnan), December 2002.

National Society of Collegiate Scholars, Outstanding Faculty Award, April 2002.

Best Dissertation Award Finalist, International Conference on Information Systems (ICIS), December 2001.

Best Student Presentation, Workshop on Information Systems and Economics (WISE), December 1998.

DuWayne Peterson Fellowship, Massachusetts Institute of Technology, Sloan School, 1997-1999.