

CHRIS FORMAN
ASSISTANT PROFESSOR OF INFORMATION TECHNOLOGY MANAGEMENT
ROBERT AND STEVIE SCHMIDT TERM PROFESSOR
COLLEGE OF MANAGEMENT
GEORGIA INSTITUTE OF TECHNOLOGY

I. EARNED DEGREES

- June 2002 **Northwestern University**, Evanston, IL
Ph.D., Managerial Economics and Strategy
Thesis: Organizations, User Choice, and the Data Communications Revolution
Advisor: Shane Greenstein
- May 1994 **University of Pennsylvania**, Philadelphia, PA
B.A., Major: Economics; Minor: Mathematics (*summa cum laude*)

II. EMPLOYMENT

- 8/09 - present **Georgia Institute of Technology**, Atlanta, GA
Associate Professor, College of Management
- 8/07 - present **Georgia Institute of Technology**, Atlanta, GA
Assistant Professor, College of Management
- 8/02 – 7/07 **Carnegie Mellon University**, Pittsburgh, PA
Assistant Professor, Tepper School of Business
- 6/04 **Federal Reserve Bank of San Francisco**, San Francisco, CA
Visiting Scholar, Economic Research
- 9/99 – 6/02 **Northwestern University**, Evanston, IL
Instructor, Kellogg School of Management
- 6/99 – 9/99 **Board of Governors of the Federal Reserve System**, Washington, DC
Summer Intern, Industrial Output Division
- 5/94 – 8/96 **Lehman Brothers**, Boston, MA
Associate Economist, Global Economics
- 5/93 – 8/93 **National Westminster Bank**, Bridgewater, NJ
Summer Intern, Call Center Operations

III. TEACHING

A. INDIVIDUAL STUDENT GUIDANCE

Doctoral Students: Committee Member

- Peng Huang, College of Management, Georgia Institute of Technology, “Essays on Innovative Ecosystems in the Enterprise Software Industry” (ongoing).

- Nishtha Langer, Tepper School of Business, Carnegie Mellon University, 2007, “Essays in Information Technology Management,” Assistant Professor, Indian School of Business.
- Byung Cho Kim, Tepper School of Business, Carnegie Mellon University, 2007, “Essays on Software Market: Security, Liability, and Pricing,” Assistant Professor, Pamplin College of Business, Virginia Institute of Technology
- Jeff Roberts, Tepper School of Business, Carnegie Mellon University, 2006, “Open Source Software Participation: Developer Motivations and Performance,” Assistant Professor, A.J. Palumbo School of Business Administration, Duquesne University
- Ji Woong Yoon, Heinz School of Public Policy & Management, Carnegie Mellon University, 2005, “Essays on Technology Innovation Management and Policy,” Kyung Hee University, Seoul, South Korea.

Doctoral Students: Summer Paper Reader

- Wen Wen, College of Management, Georgia Institute of Technology, Summer 2009, “Threat to Freedom: The Impact of Intellectual Property Enforcement on Open Source Adoption.”
- Anand Nandkumar, Heinz School of Public Policy & Management, Carnegie Mellon University, Reader, Second Summer Paper, Summer 2006, “Competition and Quality Restoration: Empirical analysis of vendors response to common vulnerabilities.”
- Bryon Balint, Tepper School of Business, Carnegie Mellon University, Ongoing, January 2006 – present, “Capabilities and Learning in eSourcing;” Reader, Second Summer Paper, “Performance Effects of the eSourcing Capability Model” Summer 2007; Reader, First Summer Paper, “Implementing the eSourcing Capability Model, Summer 2006.

Research with Undergraduate Students

- Karan Jhurani, Georgia Institute of Technology, Industry Dynamics in Enterprise Software, Summer 2008 – present.

Articles co-authored with Ph.D. students: IV.A.2, IV.B.4, IV.B.14, IV.B.18

B. OTHER TEACHING ACTIVITIES

Courses Taught at Georgia Tech*

MGT 6057TSA: Business Process Analysis and Design, Fall 2008; 29 students; rating: 4.8/5.0
 MGT 6057TSA: Business Process Analysis and Design, Fall 2007; 45 students; rating: 4.8/5.0
 MGT 4057TS1: Business Process Analysis and Design, Fall 2008; 51 students; rating: 4.7/5.0
 MGT 4057TS1: Business Process Analysis and Design, Fall 2007; 20 students; rating: 4.6/5.0

*Ratings are from item 10 in the CIOS survey: “The instructor was an effective teacher.”

Courses Taught at Carnegie Mellon

Information Technology Management, MBA	three times per year, 2006-2007
Real Time Decisions with Resource Planning Systems, MBA	once/twice per year, 2005-2007
Telecommunications and Network Management, Undergraduate	once per year, 2005-2007
Management Information Systems, Undergraduate	twice per year, 2002-2005
Seminar in Information Systems, Ph.D.	once per year, 2003-2004, 2006-2007

Curriculum Development

1. Business Process Analysis and Design (MBA and Undergraduate, Georgia Tech) (restructuring of existing course)

I introduced new topics on data-driven decision making and incorporated the ERP simulation game described below.

2. Real Time Decisions with Resource Planning Systems (MBA, Carnegie Mellon) (new course)

This course was co-developed and co-taught with Professor Laurens Debo, Assistant Professor of Operations Management. Its purpose was to show students how to make better data-driven decisions using tools from transactional and analytical IT systems, and demonstrating when and if these systems can be a source of sustainable competitive advantage. We used Jeremy Shapiro's hierarchy of supply chain systems to frame the content of the course, and drew from ideas from Information Technology, Operations Management, Strategy, and Organizational Behavior, among others. A major component of this course is the use of an ERP simulation game. Students are placed in a situation in they must run a business using an actual ERP system (SAP R/3). Using standard reports, groups must analyze the transactional data from ERP systems to make business decisions and ensure the profitability of their operations.

Pedagogical Materials Developed

1. Nabil Al-Najjar, Sandeep Baliga, and Chris Forman, "Sugar Daddy: Quotas and the U.S. Government" (Kellogg teaching case)

Illustrates welfare concepts such as consumer surplus, producer surplus, and dead-weight loss in a concrete, real-world market context.

2. Nabil Al-Najjar, Sandeep Baliga, and Chris Forman, "Steel Wars: A Battle for the Future of American Steel" (Kellogg teaching case)

Studies the impact of tariffs, subsidies, and quotas on the U.S. steel market. Focuses on "winners" and "losers" from different policies. Applications to the events in the U.S. steel market in 2001 illustrate the impact of these policies.

IV. SCHOLARLY ACCOMPLISHMENTS

A. PUBLISHED BOOKS AND PARTS OF BOOKS

1. Forman, Chris and Avi Goldfarb (2008) "How has electronic commerce research advanced understanding of the offline world," *Statistical Methods in Ecommerce Research*, Wolfgang Jank and Galit Shmueli (Eds.), New York: Wiley, p. 19-34 (refereed).
2. Arora, Ashish, Chris Forman, and Ji Woong Yoon (2008) "Software," In *Innovation in Global Industries: U.S. Firms Competing in a New World*, David C. Mowery and Jeff Macher (Eds.), Washington, DC: National Academies Press, p. 53-100 (refereed).
3. Forman, Chris and Avi Goldfarb (2006) "Diffusion of Information and Communication Technologies to Businesses," In *Handbooks in Information Systems, Volume 1: Economics and Information Systems*, Terrence Hendershott (Ed.), Amsterdam: Elsevier, p. 1-52 (reviewed by editor).
4. Forman, Chris, Avi Goldfarb, and Shane Greenstein (2003a) "The Geographic Dispersion of Commercial Internet Use," In *Communications Policy and Information Technology: Promises*,

Problems, Prospects, Steven Wildman and Lorrie Cranor (Eds.), Cambridge: MIT Press, p. 113-145 (refereed).

5. Forman, Chris, Avi Goldfarb, and Shane Greenstein (2003b) "Which Industries Use the Internet?" In *Organizing the New Industrial Economy: Advances in Applied Microeconomics – vol. 12*, Michael Baye (Ed.), Bristol, UK: Elsevier, p. 47-72 (reviewed by editor).

B. REFERRED PUBLICATIONS

Published or Forthcoming Papers in Refereed Journals

1. Arora, Ashish, Chris Forman, Anand Nandkumar, and Rahul Telang, "Competition and quality restoration: Empirical analysis of vendors response to common vulnerabilities," Forthcoming, *Information Economics and Policy*.
2. Forman, Chris and Anne Gron, "Vertical Integration, Transactions Costs, and Technology Adoption in the Insurance Industry," Forthcoming, *Journal of Law, Economics, and Organization* (Published Electronically in Articles in Advance).
3. Forman, Chris, Anindya Ghose, and Avi Goldfarb (2009) "Competition between Local and Electronic Markets: How the benefit of buying online depends on where you live," *Management Science* 55(1): 47-57.
4. Forman, Chris, Anindya Ghose, and Batia Wiesenfeld (2008) "Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets," *Information Systems Research* 19(3): 291-313.
5. Forman, Chris, Avi Goldfarb, and Shane Greenstein (2008) "Understanding the Inputs into Innovation: Do Cities Substitute for Internal Firm Resources?" *Journal of Economics and Management Strategy* 17(2): 295-316.
6. Langer, Nishtha, Chris Forman, Sunder Kekre, and Alan Scheller-Wolf (2007) "Assessing the Impact of RFID on Return Center Logistics" *Interfaces* 37(6): 501-514.
7. Arora, Ashish and Chris Forman (2007) "Proximity and Information Technology Outsourcing: How Local are IT Services Markets" *Journal of Management Information System* 24(2): 73-102.
8. Chen, Pei-yu and Chris Forman (2006) "Can Vendors Influence Switching Costs and Compatibility in an Environment with Open Standards?" *MIS Quarterly* 30(Special Issue): 541-562.
9. Forman, Chris (2005) "The Corporate Digital Divide: Determinants of Internet Adoption," *Management Science* 51(4): 641-654.
10. Forman, Chris, Avi Goldfarb, and Shane Greenstein (2005) "How Did Location Affect Adoption of the Commercial Internet? Global Village vs. Urban Leadership," *Journal of Urban Economics* 58(3): 389-420.
11. Doms, Mark and Chris Forman (2005) "Prices for Local Area Network Equipment," *Information Economics and Policy* 17(3): 365-388.
12. Forman, Chris, Avi Goldfarb, and Shane Greenstein (2005) "How do industry features influence the role of location on Internet adoption?" *Journal of the Association for Information Systems* 6(12): 383-408.

13. Forman, Chris, Avi Goldfarb, and Shane Greenstein (2005) "Geographic Location and the Diffusion of Internet Technology," *Electronic Commerce Research and Applications* 4(1): 1-10.

Papers Submitted to Refereed Journals

14. Arora, Ashish, Chris Forman, William Vogt, and Jiwoong Yoon, "Complementarity of Technology Adoption and Technology Innovation: Evidence from the Software Industry," under revision for second round review, *Information Economics and Policy*.
15. Langer, Nishtha, Chris Forman, Sunder Kekre, and Baohong Sun, "Ushering Buyers into Electronic Channels: An Empirical Analysis," submitted, *Information Systems Research*.
16. Forman, Chris, Avi Goldfarb, and Shane Greenstein, "The Internet and Local Wages: Convergence or Divergence?" under revision for second round review, *American Economic Review*.
17. Huang, Peng, Marco Ceccagnoli, Chris Forman, and D.J. Wu, "Participation in a Platform Ecosystem: Appropriability, Competition, and Access to the Installed Base," under revision for second round review, *Management Science*.
18. Ceccagnoli, Marco, Chris Forman, Peng Huang, and D.J. Wu, "Co-creation of Value in a Platform Ecosystem: The Case of Enterprise Software," submitted, *MIS Quarterly*.
19. Overby, Eric and Chris Forman, "The Market is Flat: Does Electronic Trading Reduce Geographical Price Variance," submitted, *Information Systems Research*.

Working Papers

20. Chen, Pei-yu and Chris Forman, "Switching Costs, Network Effects, and Buyer Behavior in IT Markets."
21. Balint, Bryon, Chris Forman, Sandra Slaughter, Elaine Hyder, and Mark Paulk, "Implementation Task Context and the Effectiveness of Knowledge Transfer Portfolios: Evidence from IT and Business Services Outsourcing."
22. Balint, Bryon, Chris Forman, and Sandra Slaughter, "The Effectiveness of Tool-, Team-, and Task-Based Knowledge Transfer Mechanisms for Implementing Process Innovations: Evidence from Information Technology and Business Services Offshoring"
23. Arora, Ashish, Matej Drev, and Chris Forman, "Globalization of Software Research: Does the US Have an Advantage in Applications?"
24. Wiesenfeld, Batia, Anindya Ghose, and Chris Forman, "User-generated identity disclosure and community behavior: The moderating role of community culture in online markets."
25. Wen, Wen, Chris Forman, and Stuart Graham, "Threat to Freedom: The Impact of Intellectual Property Enforcement on Open Source Adoption."

Papers in Progress

1. Chris Forman and Nicolas van Zeebroeck, "From wires to partners: how the Internet has fostered R&D collaborations across firms."

Publications in Refereed Conference Proceedings

1. Huang, Peng, Ceccagnoli, Marco, Chris Forman, and D.J. Wu, "When Do ISVs Join a Platform Ecosystem: Evidence from the Enterprise Software Industry," *Proceedings of the 30th International Conference on Information Systems*, December 2009.
2. Arora, Ashish and Chris Forman "Proximity and Software Programming: IT Outsourcing and the Local Market," *Proceedings of the 40th Hawaii International Conference on System Sciences*, January 2007.
3. Forman Chris, Anindya Ghose, and Avi Goldfarb "The Impact of Location on Consumer Purchases in Electronic Markets," *Proceedings of the 27th International Conference on Information Systems*, December 2006.
4. Forman, Chris and Anne Gron "Vertical Integration and Information Technology Adoption: A Study of the Insurance Industry," *Proceedings of the 38th Hawaii International Conference on System Sciences*, eds. Ralph H. Sprague, Jr., January 2005.
5. Forman, Chris, Avi Goldfarb, and Shane Greenstein "Adoption of the Internet by Commercial Establishments: Urban Density, Global Village, and Industry Composition," *Proceedings of the Fifth International Conference on Electronic Commerce*.
6. Forman, Chris "Switching Costs, Network Effects, and Networking Equipment: Compatibility and Vendor Choice in the Market for LAN Equipment," *Proceedings of the 23rd International Conference on Information Systems*.

C. OTHER PUBLICATIONS

Non-refereed publications

1. Forman, Chris (2009) "Book Review: The Digital Economy: Business Organization, Production Processes, and Regional Development." Forthcoming, *Journal of Regional Science*.
2. Arora, Ashish, Matej Drev, and Chris Forman (2009) "Viewpoints: The Extent of Globalization of Software Innovation," *Communications of the ACM* 52(2): 20-22.
3. Forman, Chris, Avi Goldfarb, and Shane Greenstein (2004) "City or Country: Where Do Businesses Use the Internet?" *Federal Reserve Bank of San Francisco Economic Letter*, September 3, 2004.

Research-related media mentions of refereed publications

1. CSPAN Telecast of Testimony at FCC National Broadband Plan Staff Workshop, "Economic Growth, Job Creation, Private Investment," August 26, 2009.
2. Lester Picker (2009) "The Internet, Wages, and Consumer Welfare" *The NBER Digest* April 2009.
3. Larry Yu (2008) "The Benefits of City Locations" *MIT Sloan Management Review* 49(2): 12.

D. PRESENTATIONS

Conference and workshop presentations

1. INFORMS Conference on Information Systems and Technology (CIST), San Diego, CA, “Globalization of Software Research: Does the US Have an Advantage in Applications?”
2. TPRC, Arlington, VA, September, 2009, “The Internet and Local Wages: Convergence or Divergence?”
3. Industry Studies Association Conference, Chicago, IL, May 2009, “Globalization of Software Research: Does the US Have an Advantage in Applications?”
4. Atlanta Competitive Advantage Conference, Atlanta, GA, May 2009, “Globalization of Software Research: Does the US Have an Advantage in Applications?”
5. International Industrial Organization Conference, Boston, MA, April 2009, “The Internet and Local Wages: Convergence or Divergence?”
6. American Economic Association Meetings, San Francisco, California, January 2009, “Globalization of Software Research: Does the US Have an Advantage in Applications?”
7. Workshop on Information Systems and Economics, Paris, France, December 2008, “The Internet and Local Wages: Convergence or Divergence?”
8. North American Regional Science Association Meetings, New York, New York, November 2008, “Information Technology, Organizations, and the Spatial Distribution of Economic Activity.”
9. DRUID Conference on Entrepreneurship and Innovation, Copenhagen, Denmark, June 2008, “Vertical Integration, Transactions Costs, and Technology Adoption in the Insurance Industry.”
10. NYU Conference on Global Delivery of Services, New York, NY, May 2008, “Process Innovation and Performance in IT and Business Services Outsourcing: Does Fit Matter?”
11. Sloan Industry Studies Conference, Boston, MA, May 2008, “Process Innovation and Performance in IT and Business Services Outsourcing: Does Fit Matter?”
12. Rocket Science Retailing Workshop, University of California, Riverside, Riverside, CA, February 2008, “Ushering Buyers into Electronic Channels: An Empirical Analysis.”
13. International Symposium in Information Systems (ISIS), Hyderabad, India, December 2007, “Standardization as Innovation: Decisions and Outcomes in the Implementation of a Process Improvement Framework for Service Providers.”
14. Workshop on Information Systems and Economics (WISE), Montreal, Canada, December 2007, “Ushering Buyers into Electronic Channels.”
15. Regional Science Association Annual Conference, Savannah, GA, November 2007, “Proximity and Information Technology Outsourcing: How Local are IT Services Markets?”
16. INFORMS Annual Meeting, Seattle, WA, November 2007, “Globalization of Software Innovation.”
17. INFORMS Conference on Information Systems and Technology (CIST), Seattle, WA, November 2007, “Competition between Local and Electronic Markets: How the benefit of buying online depends on where you live.”

18. Third International Conference on Outsourcing of Information Services (ICOIS), Heidelberg, Germany, May 2007, "Standardization as Innovation: Decisions and Outcomes in the Implementation of a Process Improvement Framework for Service Providers."
19. Sloan Industry Studies Conference, Boston, MA, April 2007, "Globalization of Software Innovation."
20. Statistical Challenges in Electronic Commerce Research (SCECR), Stamford, CT, May 2007, "Ushering Buyers into Electronic Channels."
21. Hawaii International Conference on Systems Science (HICSS), Waikoloa, HI, January 2007, "Proximity and software programming: IT Outsourcing and the Local Market."
22. Hawaii International Conference on Systems Sciences (HICSS), Waikoloa, HI, January 2007, "Geography and Electronic Commerce: Measuring convenience, selection, and price."
23. Workshop in Information Systems and Economics (WISE), Evanston, IL, December 2006, "Understanding the Inputs into Innovation: Do Cities Substitute for Internal Firm Resources?"
24. NBER Summer Institute, Boston, MA, July 2006, "Understanding the Inputs into Innovation: Do Cities Substitute for Internal Firm Resources?"
25. Board on Science, Technology, and Economic Policy (STEP) Conference on Globalization of Innovation, National Academy of Sciences, Washington, DC, April 2006, "Globalization of Software Innovation."
26. Sloan Industry Studies Annual Meeting, Boston, MA, December 2005, "Proximity and Software Programming: IT Outsourcing and the Local Market."
27. Workshop on Information Systems and Economics (WISE), Irvine, CA, December 2005, "Complementarity of Technology Adoption and Technology Innovation: Evidence from the Software Industry."
28. INFORMS Conference on Information Systems and Technology (CIST), San Francisco, CA, November 2005, "Do Cities Substitute for Internal Firm Resources? A Study of Advanced Internet Technology Adoption."
29. Workshop on RFID-Integrated Supply Chains, Baylor University, Waco, TX, October 2005, "The Value of RFID Use in Return Center Logistics."
30. NSF-CONACYT Workshop on Internet use in the Americas, Mexico City, Mexico, June 2005, "Do Cities Substitute for Internal Firm Resources? A Study of Advanced Internet Technology Adoption."
31. International Industrial Organization Conference (IIOC), Atlanta, GA, April 2005, "Vertical Integration and Information Technology Adoption: A Study of the Insurance Industry."
32. Hawaii International Conference on System Sciences (HICSS), Waikoloa, HI, January 2005, "Vertical Integration and Information Technology Adoption: A Study of the Insurance Industry."
33. Management Information Systems Research Center (MISRC)/Center for Research on Information Technology and Organizations (CRITO) Symposium on the Digital Divide, Minneapolis, MN, August 2004, "How Do Industry Features Affect the Role of Location on Adoption."

34. Workshop on Information Systems and Economics (WISE), Seattle, WA, December 2003, “How Did Location Affect the Adoption of the Commercial Internet? Global Village, Urban Density, and Industry Composition.”
35. International Conference on Electronic Commerce (ICEC), Pittsburgh, PA, October 2003, “How Did Location Affect the Adoption of the Commercial Internet? Global Village, Urban Density, and Industry Composition.”
36. Conference on Economics of Information and Communication Technologies, ZEW, Mannheim, Germany, July 2003, “How Did Location Affect the Adoption of the Commercial Internet? Global Village, Urban Density, and Industry Composition.”
37. International Industrial Organization Conference (IIOC), Boston, MA, April 2003, “Digital Dispersion: An Industrial and Geographic Census of Commercial Internet Use.”
38. International Conference on Information Systems (ICIS), Barcelona, Spain, December 2002, “Switching Costs, Network Effects, and Networking Equipment: Compatibility and Vendor Choice in the Market for LAN Equipment.”
39. Workshop on Information Systems and Economics (WISE), Barcelona, Spain, December 2002, “Digital Dispersion: An Industrial and Geographic Census of Commercial Internet Use.”
40. Productivity Potpourri Session, NBER Summer Institute, Cambridge, MA, July 2002, “The Corporate Digital Divide: Determinants of Internet Adoption.”
41. UNU/WIDER Conference: The New Economy in Development, Helsinki, Finland, May 2002, “The Corporate Digital Divide: Determinants of Internet Adoption.”
42. Workshop on Information Systems and Economics (WISE), New Orleans, LA, December 2001, “The Corporate Digital Divide: Determinants of Internet Adoption.”
43. Session on Output and Price Measurement, NBER Summer Institute, Cambridge, MA, July 2001, “Prices for Local Area Network Equipment.”
44. Conference on the Economics of Information and Communication Technologies, ZEW, Mannheim, Germany, June 2001, “The Effects of Compatibility on Buyer Behavior in the Market for Computer Networking Equipment.”
45. CCC Doctoral Colloquium, Duke University, Durham, NC, April 2001, “The Effects of Compatibility on Buyer Behavior in the Market for Computer Networking Equipment.”
46. Brookings Institution Workshop on Communications Output and Productivity, Washington, DC, February 2001, “Prices for Local Area Network Equipment.”

Invited seminars at other institutions

1. School of Management, George Mason University, Fairfax, VA, November 6, 2009, “The Internet and Local Wages: Convergence or Divergence?”
2. W. P. Carey School of Business, Arizona State University, Tempe, AZ, November 7, 2008, “The Internet and Local Wages: Convergence or Divergence?”
3. Terry College of Business, University of Georgia, Athens, GA, October 17, 2008, “Vertical Integration, Transactions Costs, and Technology Adoption in the Insurance Industry.”

4. Terry College of Business, University of Georgia, Athens, GA, February 15, 2008, "Economics of Information Systems."
5. College of Management, Georgia Institute of Technology, Atlanta, GA, January, 16, 2007, "Geography and Electronic Commerce: Measuring convenience, selection, and price."
6. Eli Broad College of Business, Michigan State University, East Lansing, MI, November 17, 2006, "Geography and Electronic Commerce: Measuring convenience, selection, and price."
7. Department of Social and Decision Carnegie Mellon University, Pittsburgh, PA, September 29, 2006, "Geography and Electronic Commerce: Measuring convenience, selection, and price."
8. Federal Communications Commission, Washington, DC, March 28, 2006, "How Did Location Affect the Adoption of the Commercial Internet? Global Village vs. Urban Density."
9. Katz School of Business, University of Pittsburgh, Pittsburgh, PA, October 14, 2005, "Do Cities Substitute for Internal Firm Resources? A Study of Advanced Internet Technology Adoption."
10. Robert H. Smith School of Business, University of Maryland, College Park, MD, September 9, 2005, "Do Cities Substitute for Internal Firm Resources? A Study of Advanced Internet Technology Adoption."
11. Federal Reserve Bank of San Francisco, San Francisco, CA, June 9, 2004, "How Does Vendor Distance Influence the IT Outsourcing Decision."
12. Federal Reserve Bank of San Francisco, San Francisco, CA, June 8, 2004, "How Did Location Affect the Adoption of the Commercial Internet? Global Village, Urban Density, and Industry Composition."
13. Wharton School of Business, University of Pennsylvania, Philadelphia, PA, April 1, 2004, "How Did Location Affect the Adoption of the Commercial Internet? Global Village, Urban Density, and Industry Composition."
14. Sauder School of Business, University of British Columbia, Vancouver, BC, March 26, 2004, "How Did Location Affect the Adoption of the Commercial Internet? Global Village, Urban Density, and Industry Composition."
15. Carlson School of Management, University of Minnesota, Minneapolis, MN, January 23, 2004, "Switching Costs and Network Effects in the Market for Routers and Switches."
16. Center of Economic Studies, Bureau of the Census, Washington, DC, May 1, 2003, "Digital Dispersion: An Industrial and Geographic Census of Commercial Internet Use."
17. H.J. Heinz School of Public Policy and Management, Carnegie Mellon University, Pittsburgh, PA, November 18, 2002, "Digital Dispersion: An Industrial and Geographic Census of Commercial Internet Use."

Other talks at conferences/symposia

1. Atlanta Competitive Advantage Conference (ACAC), Atlanta, GA, June 2008, Discussant, Session on "Strategies for Platform Competition."
2. Measuring Broadband Workshop, Pew Internet Project, Washington, DC, June 2006, Panel on Measuring Internet Use in the U.S.

3. Productivity Program Meeting, NBER, Boston, MA, March 2003, Discussant, "IT and Productivity in IT-Using and IT-Producing Industries: New Micro Data Evidence." (paper written by B.K. Atrostic and Sang Nguyen).

V. SERVICE

A. PROFESSIONAL CONTRIBUTIONS

Editorial Contributions

1. Associate Editor, *Management Science* (April 2008 -) (Guest AE 2007-2008)
2. Associate Editor, *Information Systems Research* (January 2007 -)
3. Associate Editor, *Information Economics and Policy* (January 2008 -)
4. Editorial Board Member, *Journal of Association for Information Systems* (July 2007 -)
5. Guest Editor, *Information Technology and Management* (June 2007)
6. Associate Editor, International Conference on Information Systems (2006 -)

Service in Professional Organizations

1. Founding Member, Early Career Development Committee, Sloan Industry Studies Community, 2004-2006
2. Reviewer for Sloan Industry Studies Conference, 2007-2008.
3. Reviewer for Sloan Industry Studies Best Dissertation Award, 2005-2006.

Conference or Program Committee Chair or Member

1. Co-Chair, INFORMS Conference on Information Systems and Technology CIST, Denver, CO (2004).
2. Program Committee Member, INFORMS Conference on Information Systems and Technology (CIST), 2003-2009.
3. Session Chair, Session on RFID in Supply Chain and Services Management, INFORMS Annual Conference--2006.

Referee for Technical Journals

- *Management Science*
- *Information Systems Research*
- *MIS Quarterly*
- *Journal of Urban Economics*
- *Journal of Industrial Economics*
- *Journal of Labor Economics*
- *Information Economics and Policy*
- *Decision Support Systems*

- *Electronic Commerce Research Journal*
- *Electronic Commerce Research and Applications*
- *Journal of Information Technology*
- *Growth and Change*
- *Journal of the Association for Information Systems*
- *Spatial Economic Analysis*
- *International Conference on Information Systems*
- *Hawaii International Conference on System Sciences*
- *International Conference on Electronic Commerce*
- *DATABASE*
- *Journal of Labor Economics*
- *Research Policy*

B. CAMPUS CONTRIBUTIONS

Committees at Georgia Tech

- Member, Ledbetter Professor Real Estate Committee, College of Management, 2009
- Chair, Faculty Recruiting Committee, IT Management, College of Management, 2008 – 2009
- Member, Undergraduate Committee, College of Management, 2007 –
- Member, IT Committee, College of Management, 2007 – 2008

Committees at Carnegie Mellon

- Information Networking Institute (INI) Curriculum Committee, 2005 – 2007
- Teaching Assignments Committee, Tepper School of Business, 2004
- Ph.D. Committee, Tepper School of Business, 2003 – 2007
- Coordinator, Information Systems Seminar Series, 2002-2003, 2006-2007

Other Activities

- Speaker, College of Management internal seminar series, April 2008
- Guest Speaker, Information Technology Management Ph.D. seminar, Georgia Tech, February 2008
- Guest Speaker, SETChange Program Course on Industry Dynamics and Technological Change, Carnegie Mellon, April 2004
- Affiliate, Software Industry Center, Carnegie Mellon, 2004-2007.

VI. GRANTS AND CONTRACTS

A. AS PRINCIPAL AND CO-PRINCIPAL INVESTIGATORS

1. NET Institute, “When Do Complementors Join a Platform? Some Evidence from the Enterprise Software Industry,” \$3,000 (with Peng Huang, Marco Ceccagnoli, and D.J. Wu).
2. Kauffman/Georgia Research Alliance grant from Roadmap for an Entrepreneurial Economy Initiative, “Measuring How Users Influence Adoption of Enterprise Applications,” \$15,000 (with D.J. Wu).
3. Alfred P. Sloan Foundation Industry Studies Fellowship, “Lead User Innovation and the Globalization of Software Development,” \$45,000.

4. Contract from National Academy of Sciences for Research Project on the Globalization of Software Innovation, \$5000 (with Ashish Arora and Jiwoong Yoon)
5. Grant from NET (Networks, Electronic Commerce, and Telecommunications) Institute, "The Impact of Location on Consumer Purchases in Electronic Markets," \$6000 (with Anindya Ghose and Avi Goldfarb).
6. Center for Analytical Research in Technology (CART) Grant, Tepper School of Business, "Uncertainty, Governance, and Performance Outcomes in eSourcing," \$25,000 (with Sandra Slaughter and Elaine Hyder (lead investigators)).
7. Berkman Faculty Development Grant, Carnegie Mellon University, "How Does Location Shape Consumer Use of Online Channels," \$1,500.
8. Teaching Innovation Center, Tepper School of Business, "Real Time Decisions with Resource Planning Systems," \$18,580 (with Laurens Debo).
9. Carnegie Bosch Institute Faculty Development Grant, "Patent Litigation in the Rapid Prototyping Industry: The Effect on World Markets," \$10,000 (with Karen Clay).
10. Grant from NET (Networks, Electronic Commerce, and Telecommunications) Institute, "Network Effects and Switching Costs in the Market for Routers and Switches," \$9000 (with Pei-yu Chen).

VII. HONORS AND AWARDS

1. One of the 10 Most Cited articles 2004-2008 published in the Journal of Urban Economics.
2. Best Reviewer Award, Conference in Information Systems and Technology, 2007.
3. Alfred P. Sloan Foundation Industry Studies Scholar, 2007.
4. Runner up for Best Paper Award for "Vertical Integration and Information Technology Adoption: A Study of the Insurance Industry," 38th Hawaii International Conference on System Sciences, 2003.
5. Best Paper Award for "Adoption of the Internet by Commercial Establishments: Global Village, Urban Density, and Industry Composition," Fifth International Conference on Electronic Commerce, 2003.
6. Selection for Consortium on Competitiveness and Cooperation (CCC Doctoral Consortium), 2001.
7. Recognition for Outstanding Service, Founding Member of Early Career Development Committee, Sloan Industry Studies, 2008.