

RAVI ARON

EDUCATION

1999 Leonard N. Stern School of Business, New York University
Ph.D., Information Systems

1996 Leonard N. Stern School of Business, New York University
M.Phil, Information Systems

1990 Indian Institute of Management, Bangalore
PGDIM (MBA), Finance

EXPERIENCE

2012 – The Johns Hopkins Carey Business School, Johns Hopkins University
Associate Professor

2009 – 2012 The Johns Hopkins Carey Business School, Johns Hopkins University
Assistant Professor

2006 – 2008 The Marshall School of Business, University of Southern California
Assistant Professor

1999 – 2006 The Wharton School, University of Pennsylvania
Assistant Professor

1992 – 1993 BBMB & Software Alliance Group of Companies, Kuala Lumpur, Malaysia
Systems Consultant

1990 – 1992 Citicorp, Inc., New Delhi & Madras, India
Assistant Manager

1986 - 1988 I-Telsoft-I Ltd., Madras, India
Founder & Technical Director

HONORS AND AWARDS

Dean's Faculty Excellence award, Carey Business School 2016.

Johns Hopkins University Alumni Association Excellence in Teaching Award, 2012.

ISA-INFORMS Best Paper Award, Finalist, 2012.

Professor of The Year, GMBA Class of 2012, Carey Business School, 2011.

Alfred P. Sloan Foundation Industry Studies Fellowship Award for 2008.

David Hauck Teaching Excellence Award, 2004, The Wharton School.

MBA Teaching Excellence, 2004, The Wharton School.

Undergraduate Teaching Excellence Award, 2004, The Wharton School.

Undergraduate Teaching Excellence Award, 2003, The Wharton School.

Herman E. Kross Doctoral Dissertation Award, 1999, Leonard N. Stern School of Business, NYU.

PhD Student Teaching Excellence Award, 1998, Leonard N. Stern School of Business, NYU.

JOURNAL PUBLICATIONS

- Markopoulos, P., Aron, R., and Ungar, L., “Product Information Websites: Are they Good for Consumers?” *Journal of Management Information Systems*, December 2016, 33(3), 624 - 651.
- Liu, Y., Aron, R. “Organizational Control, Incentive Contracts, and Knowledge Transfer in Offshore Business Process Outsourcing, Information Systems Research,” *Information Systems Research*, March 2015, 26(1): 81-99.
- Williams, K., Chambers, C., Hough, D., Dada, M., Aron, R., Ulatowski, M. “Applying JIT Principles to Resident Education to Reduce Patient Delays: A Pilot Study in an Academic Medical Center Pain Clinic,” *Pain Medicine*, September 16, 2014, 312-318.
- Williams, K., Chambers, C., Hough, D., Dada, M., Aron, R., Ulatowski, M. “Using Process Analysis to Assess the Impact of Medical Education on the Delivery of Pain Services: A Natural Experiment,” *Anesthesiology*, April 2012, 116(4):931-9.
- Aron, R., Dutta, S., Janakiram, R., Pathak, P.S. “The Impact of Automation of Systems on Medical Errors: Evidence from Field Research,” *Information Systems Research*, Vol. 22, No. 3, September 2011, pp. 429–446.
- Seshasai, S., Gupta, A., Aron, R. “The 24-Hour Knowledge Factory: Work And Organizational Redesign And Associated Challenges,” *Information Resources Management Journal*, October-December 2010, Vol. 23, No. 4.
- Markopoulos, P., Aron, R., and Ungar, L. “Information Market for Product Attributes: A Game Theoretic, Dual Pricing Mechanism,” *Decision Support Systems*, Volume 49, Issue 2, May 2010.
- Aron, R., Ungar, L., and Valluri, A. “A Model of Market Power and Efficiency in Private Electronic Exchanges,” *European Journal of Operations Research*, Volume 187, Issue 3, 16 June 2008, Pages 922-942.
- Aron, R., Bandopadhyay, S., Jayanty, S., and Pathak, P.S. “Monitoring Process Quality in Offshore Outsourcing: A Model and Findings from Multi-Country Survey,” *Journal of Operations Management*, Volume 26, Issue 2, March 2008, Pages 303-321.
- Aron, R., and Pathak, P.S. “Impact of Internet-Based Distributed Monitoring Systems on Off-Shore Sourcing of Services,” *ACM Transactions On Internet Technology*, Vol. 7, No. 3, Article 16, August, 2007.
- Aron, R., Sundararajan, A., Viswanathan, S. “Intelligent Agents in Electronic Markets for Information Goods: Customization, Preference Revelation and Pricing,” *Decision Support Systems*, Volume 41, Issue 4, May 2006, Pages 764-786.
- Aron, R., and Singh, J. “Getting Offshoring Right” *Harvard Business Review*, December 2005, pp. 135-143.
- Aron, R., Clemons, E.K., and Reddi, S. “Just Right Outsourcing: Understanding and Managing Strategic Risk,” *Journal of Management Information Systems*, Fall 2005, Vol. 22, No. 2, pp. 37-55.
- Anand, K.S., and Aron, R. “Group-Buying on the Web: A Comparison of Price Discovery Mechanisms”, *Management Science*, Vol. 49, No. 11 November 2003, pp. 1546-1562.
- Aron, R., and Clemons, E.K. “Achieving the Optimal Balance Between Investment in Quality and Investment in Self-Promotion for Information Products,” *Journal of Management Information Systems*, Fall 2001, Vol. 18, No. 2, pp. 65-88.
- Aron, R., and Sundararajan, A. “An Economic Analysis of Electronic Secondary Markets: Installed Base, Technology, Durability and Firm Profitability,” *Decision Support Systems* 24, December 1998, 3-16.

JOURNAL ARTICLES UNDER REVIEW

- Aron, R., Pathak, P.A., Pasarkar, P., and Bisi, A., From Supply Chains To Demand Chains: Evidence From Field Research In The Medical Equipment Industry, *Production And Operations Management*, (Under Review).
- Aron, R., Gao, G., Pathak, P., and Pasarkar, P., “Disaggregating the Differential Impact of Health Care IT in Complex Care Delivery: Insights from Field Research in Chronic Care,” *Journal of the Association for Information Systems*, (Under Review).
- Aron, R., Praveen, P. A., Ramamoorthi, H. Is that High Sugar or a Sugar High? Ask the Algorithm!, *MIS Quarterly* (Under Review).

RESEARCH IN PROGRESS

- Sapirstein, A., Aron, R., Phan, P., Lee, S.H., Predicting Hospital Ward Susceptibility: A Machine Learning Approach to Combining Structured, Unstructured and Semi-Structured data, *Management Science* (Pending Submission).
- Aron, R., Pathak, P.A., and Phan, P., Mitigating The Curse Of Dimensionality In Machine Learning: An Approach To Creating Predictive Models With Health Care Data, Special Issue of *Information System Research* (Due January, 2019).
- Aron, R., Gao, G., Pathak, P. A. Comparing Machine Learning and Human Mediated Inference Mechanisms In Expert Decision Making – Evidence From Field Research.
- Anand, K.S., and Aron, R., “Quality, Incentives and Inspection Regimes in Global Service Supply Chains: Theoretical Predictions of Behavioral Outcomes,” *Manufacturing and Services Operations Management* (revising to resubmit).
- Anand, K.S., and Aron, R. “Forward Aggregation in Electronic B2B Markets: Model and Experimental Findings,” *Management Science* (revising to resubmit).
- Aron, R., Mani, D., Pathak, P.A. “Inter-Organizational Coordination, Contract Structure & Strategic Ambiguity In The Global Sourcing of Knowledge-Intensive Services,” *Organizational Science*, (Pending Submission, January 2019).
- Aron, R., Pathak, P.A. “Digitizing Workflows, Process Standardization & Operational Efficiency In Clinical Laboratories: Evidence From Field Research,” *Management Science*, (Pending Submission, January 2019).
- Aron, R., Lee, S.H., Phan, P., Pathak, P.A. “Clinical Decision Support Systems and Handover Effectiveness: Evidence from Field Research” *Management Science*, (Pending Submission, July 2018).
- Aron, R., Pathak, P., Puranam, P., “Big Data & Analytics: Globally Distributed Teams, Real-Time Controls and Knowledge Transfer; Evidence From Field Research.”

OTHER RESEARCH

- United States Patent 7865546: “*Method and Apparatus for Monitoring and Notification in a Network*” co-inventors: Alexander S. Tuzhilin and Ravi Aron.

BOOK CHAPTERS

- Aron, R. Global Innovation in Offshoring of Financial Services. In Mowery, D., Macher, J. (Eds.), *Globalization of Innovation: National Academies Press, Washington, DC, 2008*.
- Aron, R., and Liu, Y. “Determinants of Operational Risk in Global Sourcing of Financial Services,” In *Brookings Institute Forum Journal of Trade & Economics*, 2005.

SELECTED RESEARCH PROJECTS & WORKING PAPERS

- Aron R. Decision-Making And Trust In The Age Of The Algorithm: How Managers Work With And Manage Machine-Generated Insights.
- Aron & Pathak: Technology Enabled Physician Collaboration And The Cost & Quality Of Care Delivered: Evidence From Field Research.
- Aron, R. (2003) “A Framework to Measure the Impact of Risk on the Nature and Extent of Cross-Border Outsourcing of IT-Enabled Services – An Empirical Study.”
- Aron, R. “The Value Hierarchy Index: An Approach to Measuring Operational Risk in Outsourcing Business Processes.” OPIM Working Paper 02-12-03.
- Aron, R., and Olivares, M. (2003): “Monitoring Precision in Outsourcing Contracts with Output Verification Costs.” OPIM Working Paper 02-01-04.
- Aron, R., Singh, J., (2003): “Offshore Sourcing of Services: The Extended Organizational Form and the IT-Enabled Right Sourcing of Processes – An Empirical Study,” OPIM Working Paper 02-12-03.
- Aron, R., (2002-2003): “BPO: Pricing, Productivity and Risk – An Empirical Study” Wharton-Gartner Group Research Initiative.
- Aron, R., Croson, D., Croson, R., (2002-03): “Pricing and Surplus Division in Standard vs. Reverse Auctions: An Experimental Comparison”.
- R. Aron, “Impact of Search Engine Characteristics and Product Complexity on Electronic Markets,” OPIM Working Paper, 00-04-03.
- R. Aron, A. Sundararajan (1999). “A Model of Quality Uncertainty, Signaling and Seller Reputations in Electronic Secondary Markets”, Accepted at *WISE 1999* (Workshop on Information Economics), OPIM Working Paper, 99-12-24.

REFEREED CONFERENCE PUBLICATIONS & PRESENTATIONS

- “Predicting Complex Outcomes Using Machine Learning: A Dimensionality Reduction Approach,” INFORMS annual meeting, October 23, 2017.
- “Collaboration Between Specialist Physicians in Multiple Countries Enabled by Information Technology: Evidence From Field Research” INFORMS 2015, November 1, 2015.
- “Structure of The Inspection Regime, Inspection Intensity & Extent, And Output Quality, In Offshore Outsourcing of Services: Theory & Evidence,” *WISE 2007* at Montreal, December 2007.
- “Quality, Incentives and Inspection Regimes in Offshore Service Production: Theory and Evidence,” *WISE 2006* at Evanston, IL, December 2006.
- “Is Online Product Information Availability Driven by Quality or Differentiation?” *International Conference on Information Systems* – 2005.
- “Determinants of Operational Risk & Effectiveness of Instruments of Governance in Offshore Outsourcing of Business Process: Evidence from Field Research,” *WISE 2005* at Los Angeles, CA, December 2005.
- “Offshore Outsourcing of Services: The Impact of Process Complexity on Productivity, Risk and Governance Structures,” *WISE 2004* at Baltimore, MD, December 2004.
- “Forward And Reverse Aggregation Equilibria in Electronic B2B Markets: Pricing and Market Efficiency,” *WISE 2003* at Seattle, WA, December 2003.
- “Value Hierarchy Index and Operational Risk in Outsourcing Business Processes,” *WISE 2003* at Seattle, WA, December 2003.
- “Pricing and Surplus Division in Standard vs. Reverse Auctions: An Experimental

- Comparison,” *WISE 2001* at New Orleans, LA, December 2001.
- “A Comparison of Price Discovery Mechanisms: Group-Buying and Posted Prices on the Web,” *WISE 2001* at New Orleans, LA, December 2001.
 - “Quality Uncertainty and Seller Reputation in Electronic Secondary Markets – ‘the market for lemons’ Revisited”, Workshop on Information Economics - *WISE 1999* at Charlotte, NC, December 1999.
 - “Talking Shop with Intelligent Agents: Customization, Preference Revelation and Pricing,” *WISE 1998* at New York, NY, December 1998
 - “Search Characteristics and Equilibrium in Internet-based Electronic Marketplaces,” Workshop on Information Economics - *WISE 1997* at Atlanta, GA, December 1997.

INVITED TALKS, PANELS AND SEMINARS

- “Is that High Sugar or a Sugar High? Ask the Algorithm!” Research Seminar delivered at the McCombs School of Business, University of Texas, September 29, 2017.
- “Is that High Sugar or a Sugar High? Ask the Algorithm!” Research Seminar delivered at the Fox School of Business, Temple University, February 16, 2018.
- “Predicting Complex Outcomes Using Machine Learning: A Dimensionality Reduction Approach,” INFORMS annual meeting, October 23, 2017.
- “Efficient Chronic Care Delivery: Digitizing Information Flows Between Interdependent Tasks – Evidence From Field Research,” Katz Graduate School of Business, University of Pittsburgh, March, 15 2016.
- “Medical Errors & ICT: Evidence From Field Research,” INSEAD, Singapore, August 30, 2012.
- “Collaboration Between Specialist Physicians in Multiple Countries Enabled by Information Technology: Evidence From Field Research” INFORMS 2015, November 1, 2015.
- “Outsourcing: Innovation and Organization” Moderator, *World Economic Forum*, Davos Switzerland, 2006.
- “Outsourcing: It is not about Economics?” Panelist, *World Economic Forum*, Davos Switzerland, 2006.
- “Global Outsourcing of Services: Emerging Destinations and Trends” Panel Chair, *World Economic Forum*, Davos Switzerland, 2005.
- “Making Global Outsourcing Work” Panelist, *World Economic Forum*, Davos Switzerland, 2005.
- “Trade in Services and Offshoring”, *Brookings Institute*, Washington DC, 2005
- “Offshore Outsourcing of Services: A Model of the Extended Organizational Form and Survey Findings,” The Harvard Business School, 2005.
- “The Extended Organizational Form & The Global Sourcing of Services,” Leonard N. Stern School of Business, New York University, April, 2004.
- “The Extended Organizational Form – An Emerging Governance Structure in The Global Sourcing of Services,” The Tepper School of Management, Carnegie Mellon University, October 1, 2004.
- “Global Sourcing of Services” London Business School, 2003.
- “Outsourcing of Services,” *The Economist CIO Meet*, New York, March 16, 2004.
- “TTES and Building Great Firms,” Nasscom i-Tech Conference, Hyderabad, India, January 12, 2004.
- “The Supply Chain of Expertise – How BPOs impact Knowledge-Intensive-Firms,” Emerging Markets Conference on Outsourcing, London, UK, June 19, 2003.

PRESS CITATIONS OF RESEARCH

- The Wall Street Journal.
- The New York Times.
- The Economist.
- Time Magazine.
- Economic Times (India).
- Fortune, Forbes, BusinessWeek.
- CIO & CFO Magazines.

RESEARCH GRANTS

- Alfred P. Sloan Foundation Industry Studies Fellowship Grant (2008).
- The Fishman Davidson Center Research Grant 2004 – 2005: “Global Sourcing of Services: Metrics for Predicting Risk.”
- Phyllis Mack Center & WeBI– Research Grants 2004 – 2005: “Study of Risk in Off-Shore Outsourcing.”
- Singapore Management University-Wharton Research Grant - 2003 - 04: “Determinants of Operational Risk & Effectiveness of Instruments of Governance in Off-Shore Outsourcing of Business Process.”
- SMU-Wharton Research Grant - 2002 - 03: “IT-Enabled Outsourcing of Business Processes (BPO) and The Extended Organizational Form.”
- SMU-Wharton Research Grant - 2001 - 02: “Strategic Information Sharing in Electronic Markets - An Empirical Study.”
- WeBI – 2001-2002: “The Impact of Online Product Reviews and Electronic Communities on Market Outcomes: An Experimental Study.”
- *Mack Center* – 2002 “Information Technology-Enabled Alliances: A Study of Strategic Outsourcing of Information Intensive Processes.”
- WeBI – 2002 “Strategic Outsourcing: A Study of Technology-Enabled Collaborative e-Commerce.”

TEACHING

The Johns Hopkins Carey Business School: 2009 -

- Online Course: BU.350.620: Information Systems (Fall 2017, '18).
- Online Course: BU320.701.81: Emerging Frontiers In Health Care Strategy & Technology (Fall 2017, '18).
- BU 920.610: G1 & G2 Digital Marketplaces (Spring 2011, '12, '13, 14, 15, '16).
- BU.771.750: Information Technology Integration For Business (Fall 2010).
- BU320.701.81: Emerging Frontiers In Health Care Strategy & Technology (Spring '10, '11, '12).
- BU.771.750: Strategy & Information Technology Integration (Summer 2009).
- BU.790.031: Business Processes I
- BU.790.037: Business Process II

The Marshall School, USC: 2006 – 2007:

- IOM 599: Global Businesses & Markets: Strategies Enabled By Technology (Spring 2007, '08).
- IOM 499: Technology-Enabled Global Businesses, Markets & Sourcing (Spring 2007, '08).

The Wharton School, UPENN: 2000 – 2006:

- Information, Industry Structure and Competitive Strategy – OPIM 666 (Fall 2005).
- Electronic Commerce and Strategy – EMTM 595 (Spring, 2003, 2004).

- Management Information Systems – OPIM 210 (Fall 2004, 2003, 2002).
- Electronic Markets and IT Enabled Strategies – OPIM 676 (Fall 2005, 2004, 2003, 2002).
- Advanced Topics in Information Strategy - OPIM 669 (Spring 20001).
- Information Systems, Strategy and Economics – OPIM 899 (WEMBA - Summer, 2000).

Ph.D. Courses: The Wharton School, UPENN: 2000 – 2006:

- Research Seminar in Information Technology - OPIM – 960 (Fall, 2004, 2003, 2001).
- Advance Research Topics in Information Systems Strategy & Economics- OPIM 961 (Fall 2000).

EXECUTIVE TEACHING

The Wharton School, UPENN: 2000 – 2016:

- Lead Faculty* (*Pro Bono*) – Emerging Electronic Channels & IT Strategy, GOOGLE.
- Lead Faculty* – Big Data & Analytics, Oliver Wyman.
- Lead Faculty* – Big Data & Analytics, Digicel Group (Caribbean, Europe).
- Lead Faculty* in the Strategy Program for IBM Asia (2012 – 2014).
- Academic Director & Lead Faculty Global Strategy Program (IBM India).
- Academic Director & Lead Faculty Strategy & Leadership Program for WIPRO Group
- Academic Director & Lead Faculty for Custom Program on Management Development – Siam Cement Group, Thailand (2009 – 2015).
- Academic Director & Lead Faculty for Strategy Program BBVA Bank (Spain).
- Lead Faculty for IT Strategy & Financial Services, Minsheng Bank (China).
- Lead Faculty for Electronic Marketplaces & IT Strategy CMB Bank (China).
- Academic Director and Lead Faculty of Custom Program for ADP on IT Strategy.
- Academic Director and Lead Faculty for Custom Program on IT Strategy and Innovation – to Royal Bank of Scotland, Edinburgh, UK.
- Academic Director and Lead Faculty of Custom Program on IT Strategy and Innovation in Service Business for DPWN Group (Germany).
- Co-Academic Director of Open Enrollment Program: Business Process Outsourcing (2002-2004).
- Taught several modules in Open Enrollment Programs on Electronic Commerce, IT Strategy, and Offshoring & Outsourcing.
- Taught sessions on Offshoring & Outsourcing in Wharton’s AMP and EDP programs (2005, 2002 & 2001).
- Taught a 3-day module on IT Strategy and Information Resources Management for the Siam Cement Group of Companies in Thailand (2006, 2005, 2004, 2003, 2002 & 2001).
- Lead Faculty in a 2-day program on Information Technology and Strategy – ICSEAD, Kitakyushu, Japan (2002, 2003).

DOCTORAL STUDENTS SUPERVISED

- Siddarth Jayanty – Advisor (The Wharton School, UPENN).
- Ying Liu – Advisor (The Wharton School, UPENN).
- Annapurna Valluri - Co-Advisor (The Wharton School, UPENN).
- Panos Markopolous - Committee Member (The Wharton School, UPENN).
- Xinxin Li – Committee Member (The Wharton School, UPENN).
- Gordon Gao - Committee Member (The Wharton School, UPENN).

JOURNAL REVIEW ACTIVITIES

- Serving on the Editorial Board of Journal of Management Information Systems
- Served as Reviewer for Decision Support Systems

- Served as Reviewer for Information Systems Research
- Served as Associate Editor for Management Science
- Served as Reviewer for Management Science
- Served as Reviewer for Journal of Management Information Systems
- Served as Reviewer for Sloan Management Review
- Served as Reviewer for Organizational Science

RESEACRH IMPACT

- Served as Adviser to Infocomm Development Authority of Singapore, 2004
- Served as Adviser to the Government of Mauritius on developing IT capabilities, 2003
- Invited Panel Chair at World Economic Forum, Davos, 2005
- Invited Panel Chair at World Economic Forum, Davos, 2006
- Advised policy making bodies in India on investing in IT Infrastructure, 2004 - 2007
- Advised Mercosur on developing Tech Infrastructure for eCommerce 2000
- Advised CEOs of several Fortune 1000 firms, including those in Asia 2004 - 2018
- Advised Policy Makers in Thailand on developing IT Infrastructure 2005 - 2018
- Advised CEOs of several Fortune Asia firms on Digital Transformation 2008 - 2018