

**Curriculum Vitae**  
**Karthik Natarajan Kannan**

**ADDRESS**

Krannert School of Management  
 West Lafayette, IN – 47907

Phone: (765)-494-3414  
 Email: kkarthik@purdue.edu

**EXPERIENCE**

2003-Till date	Krannert School of Management, Purdue University <i>Associate Dean for Research and Partnerships (2020-)</i> <i>Director for Krenicki Center for BA and ML (2019-)</i> <i>Thomas Howatt Chair in Management (2017-)</i> <i>Professor of Management (2015-)</i> <i>Associate Professor of Management (2010-2015)</i> <i>Assistant Professor of Management (2003-2010)</i>	West Lafayette, IN
2013, 2014, 2015, 2018, 2019	ISB <i>Visiting Professor</i>	Hyderabad, India
2011, 2013	GISMA Business School <i>Visiting Professor</i>	Hanover, Germany
1998-2003	Carnegie Mellon University <i>Research Assistant</i>	Pittsburgh, PA
1996-1998	Infosys Technologies <i>Software Engineer, Developer, and Module Leader</i> <i>Liaison at Congra, Omaha, NE, for an off-shore team</i>	Omaha, NE; Bangalore and Chennai, India

**EDUCATION**

Aug. 2003	H. John Heinz III School of Public Policy and Management, Carnegie Mellon University <b><i>Ph.D. in Information Systems</i></b>
May 2001	Electrical and Computer Engineering, Carnegie Mellon University <b><i>Master of Science in Electrical and Computer Engineering</i></b>
Aug. 2000	Heinz School of Public Policy and Management, Carnegie Mellon University <b><i>Master of Philosophy in Public Policy and Management</i></b>
May 1996	Regional Engineering College, Trichy, India <b><i>Bachelor of Electrical and Electronics Engineering</i></b>

## SELECT LEADERSHIP ROLES

### *Associate Dean for Research and Partnerships (2020-)*

- Implementing processes to raise grants and other extra mural funding for the school
- Streamlining partnerships with companies, donors, and funding agencies

### *Director of Krenicki Center for Business Analytics and Machine Learning (formerly, Business Information and Analytics Center) (2018-)*

- Helped raise \$5M in Summer 2019 from John and Donna Krenicki to name the center (<https://www.purdue.edu/newsroom/releases/2019/Q2/multimillion-dollar-gift-supports-purdue-business-analytics-leadership.html>)
- Established consulting and research engagements with several leading companies.
- Raised \$180K from companies in the first year of operations as the Krenicki Center (despite the COVID-19 crisis). \$250K in the second year and continuing to expand.

### *Founding Academic Co-Director for Master's Degree Program in Business Analytics and Information Management (MS BAIM) (2014-2018)*

- Designed the curriculum for the program; obtained faculty approvals; secured STEM certification for the program working with the university.
- Established processes for interviewing and admitting students; participated in recruiting at the launch of the programs.
- Grew the program from 19 students in the first year to 80 students in the third year.
- The program was consistently ranked within the top 10 (the best has been #1 by the CIO Magazine in 2018).

### *Academic Director for one-year, two-year, and weekend MBA programs (2016-2018)*

- Streamlined curriculum structure to improve student engagement and experience in the programs. Introduced interesting simulation courses for our hybrid weekend MBA program.
- Established some new partnerships with other schools within Purdue to allow some select undergraduate students to join the MBA simultaneously.
- Launched the program for engineering graduate students to pursue a simultaneous MBA degree.

### *Faculty leadership as an area head (2015-2018; 2015: as a co-head)*

- Handled teaching assignments, hired and mentored junior faculty, and handled feedback for annual raises.
- Managed area budget including for activities related to teaching, recruiting, and research.
- Increased the faculty size from about five to nine in the area.
- Convinced faculty to develop unique and new courses useful for the programs. Consequently, the credits hours taught by the faculty in the area increased significantly.

## PATENT

Chen, Y.-F., Jana, R., and Kannan, K. "Methods, systems and apparatus to facilitate ranked network priority" (US20130084878).

## REFEREED JOURNAL PUBLICATIONS

- 26 Ray, A., Ventresca, M., and Kannan, K. "A Graph Based Ant Algorithm for the Winner Determination Problem in Combinatorial Auctions," *Information Systems Research* (Forthcoming).
- 25 Khern-am-nuai, W., Pamuru, V., and Kannan, K. "The Impact of an Augmented Reality Game on Local Businesses: A Study of Pokemon Go on Restaurants," *Information Systems Research* (Forthcoming).
- 24 Zhang, N., Kannan, K., and Shanthikumar, G. "Nudging Consumer Behavior: Recommender Systems with Capacity Constraints," *Production and Operations Management Society* (Forthcoming).
- 23 T. Nguyen, and Kannan, K. "Welfare Implications of Intermediary Networks," *Information Systems Research* (Forthcoming).
- 22 Wu, J., Tawarmalani, M., and Kannan, K. (2019) "Cardinality Bundles with Spence-Mirelees Reservation Prices," *Management Science*, Vol. 65(4): 1455-1947.
- 21 Khern-am-nuai, W., Kannan, K., and Ghasemkhani, H. (2018) "Extrinsic versus Intrinsic Rewards to Participate in a Crowd Context: An Analysis of a Review Platform," *Information Systems Research*, Vol. 29(4): 871-892.
- 20 Gupta, A., Kannan, K., and Sanyal, P. (2018) "Research Commentary: Experimental Economics in Information Systems Research," *Management Information Systems Quarterly*, Vol 42(2): 595-606.
- 19 Hashim, M., Kannan, K., and Wegener, D. (2018) "Nudging the Digital Pirate: A Central Role for Moral Obligations in Determining Intentions to Engage in Digital Piracy," *JMIS*, Vol. 30: 934-963.
- 18 Hashim, M., Kannan, K., and Maximiano, S. (2017) "Information Feedback, Targeting, and Coordination: An Experimental Study," *Information Systems Research*, Vol 28 (2): 289-308.
  - (Runner up Best Paper Award, ISR, 2018)
- 17 Kannan, K., Rahman, M., and Tawarmalani, M (2016) "Implications of Restricted Patch Distribution," *Management Science*, Vol. 62(11): 3161-3182.
- 16 Sha, Z., Kannan, K., and Panchal, J (2015) "Behavioral Experimentation and Game Theory in Engineering Systems Design," *Journal of Mechanical Design*, 137(5).
- 15 Overby, E., and Kannan, K (2015). "Reduced Search Costs Bidder Distribution Auctions," *Management Science*, 61(6), pp. 1398–1420.
  - (Finalist for Best Paper Award in Management Science, 2018)
- 14 Hashim, M., Kannan, K., Maximiano, S., and Rees, J (2014). "Digital Piracy, Teens, and the Source of Advice: An Experimental Study" *JMIS*, Vol. 31(2): 211-244.

- 13 Wang, T., Rees, J., and Kannan, K (2013). "The Textual Contents of Media Reports of Information Security Breaches and Profitable Short-Term Investment Opportunities," *Journal of Organizational Computing and Electronic Commerce*, Vol. 23(3): 200-223.
- 12 Wang, T., Kannan, K., and Rees, J (2013). "The Association between the Disclosure and the Realization of Information Security Risk Factors," *Information Systems Research*, Vol. 24(2):201-218.
  - (Notable contribution to the literature, American Accounting Association, AIS Section, 2018)
- 11 Kim, A., Balachander, S., and Kannan, K (2012). "Optimal Number of Slots in Search Auctions," *Marketing Letters*, Vol. 23(3): 851-868.
- 10 Kannan, K (2012). "Effects of Revelation Policies under Cost Uncertainty," *Information Systems Research*, Vol. 23(1): 75-92.
- 9 Cason, T., Kannan, K., and Siebert, R (2011). "An Experimental Study of Information Revelation Policies in Sequential Auctions," *Management Science*, Vol. 57(4): 667-688.
- 8 Kannan, K (2010). "Declining Prices in Sequential Auction with Complete Revelation of Bids," *Economics Letters*, Vol. 108(1): 49-51.
- 7 Greenwald, A., Kannan, K., and Krishnan, R (2010). "On Evaluating Information Revelation Policies in Procurement Auctions: A Markov Decision Process Approach," *Information Systems Research*, Vol. 20(4): 15-36.
- 6 Balachander, S., Kannan, K., and Schwartz, D (2009). "A Theoretical and Empirical Analysis of Alternate Auction Policies for Search Advertisements," *Review of Marketing Science*, Vol. 7, Article 5.
- 5 Tawarmalani, M., Kannan, K., and De, P (2009). "Allocating Objects in a Network of Caches: Centralized and Decentralized Analyses," *Management Science*, Vol. 55(1): 132-147.
  - (A version of this paper won the Best Paper Award in WITS, 2004)
- 4 Kannan, K., Rees, J., and Sridhar, S (2007). "Market Reactions to Security Breach Announcements: An Empirical Analysis," *International Journal of E-Commerce*, Vol. 12(1): 69-91.
- 3 Arora, A., Greenwald, A., Kannan, K., and Krishnan, R (2007). "Effects of Information Revelation Policies Under Market Structure Uncertainty," *Management Science*, Vol. 53(8): 1234-1248.
- 2 Koo, S., Kannan, K., and Lee, G (2006). "On Neighbor Selection Strategy in Hybrid Peer-to-Peer Networks," *Future Generation Computer Systems*, Vol. 22 (7): 732-741. The journal coordinated with organizers of *ICCCN, 2004* to select a few papers from the conference for a special issue. (See also the Papers in Refereed Conference Proceedings section.)
- 1 Kannan, K., and Telang, R (2005). "Markets for Software Vulnerabilities? Think again," *Management Science*, Vol. 51(5): 726-741.

## PAPERS UNDER REVIEW

Kannan, K., Saha, R., and Khern-am-nuai, W. "A Model of Online Trading Platforms: Provisioning Trust for Transactions versus Enabling Discoveries," (under revision for fifth round of review at *ISR*).

Khern-am-nuai, W., Shimao, H., and Kannan, K. "So, You Think You are Safe? Implications of Quality Uncertainty in Security Software," (Reject and Resubmit at *ISR*).

Pamuru, V., Yaroslav, R., and Kannan, K. "Using Machine Learning for Modeling Human Behavior and Analyzing Friction in Generalized Second Price Auctions," (under revision for third round of review at *ISR*).

- (A version of this was the Runner up Best Paper Award, WITS 2019)

Deng, Y., Zhang, J., Khern-am-nuai, W., and Kannan, K. "More than the Quantity: The Value of Editorial Reviews for a UGC Platform," (under revision for second round of review at *Management Science*).

Khern-am-nuai, W., Shimao, H., Komoyama, J., and Kannan, K. "Ensuring Strategic Best-Response Fairness in Machine Learning: Enhanced Color-Blind Algorithm" (under second round of review at *Management Science*).

Ghasemkhani, H., Kannan, K., and Ray, A. "Ad-Blockers: Extortionists or Digital Age Robin-Hoods?" (reject & resubmit at *MISQ*).

Khern-am-nuai, W., Ghasemkhani, H., and Kannan, K. "The Impact of Online Q&As on Product Sales: The Case of Amazon Answer" (resubmitted to *ISR* for the first round).

Deng, Y., Zhang, J., Huang, L., and Kannan, K. "Let Artificial Intelligence Be Your Shelf Watchdog: The Impact of AI-powered Shelf Monitoring on Product Sales" (under revision for second round of review at *MISQ*).

## WORK IN PROGRESS

Borwankar, S., Mukherjee, R., and Kannan, K. "To be or not to be Social? Socially Embedded Marketplace Design."

Zhang, N., Datta, S., and Kannan, K. "A Structural Model Analysis of Reward Structures on Kickstarter."

Wu, J., Tawarmalani, M., and Kannan, K. "Analyzing Mixed Bundling Pricing with Sub-Additive Constraints."

## PAPERS IN REFEREED CONFERENCE PROCEEDINGS OR CONFERENCE PROGRAMS

Deng, Y., Zheng, J., Huang, L., and Kannan, K. "The Impact of AI-powered Shelf Monitoring on Product Sales," International Conference on Information Systems 2020.

Wang, W., Zheng, J., and Kannan, K. "Who Should I Collaborate With? The Matching Value between Advertisers and Streamers," WISE 2020.

Ding, J., Lu, F., and Kannan, K. "What Can Online Personal Statements Tell Us? Insights about Physicians' Personality Traits and Their Medical Performance," CIST 2020.

Deng, Y., Zheng, J., Huang, L., and Kannan, K. "Let Artificial Intelligence Be Your Shelf Watchdog: The Impact of AI-powered Shelf Monitoring on Product Sales" CIST 2020.

Wang, W., Zheng, J., Kannan, K., and Ren, F. "More Profit or More Fairness or Both? A Dynamic Structural Model in a Transportation Network" CIST 2020.

Deng, Y., Zheng, J., Huang, L., and Kannan, K. "Let Artificial Intelligence Be Your Shelf Watchdog: The Impact of AI-powered Shelf Monitoring on Product Sales" SCECR 2020.

Pamuru, V., Yaroslav, R., and Kannan, K. "Using Machine Learning for Modeling Human Behavior and Analyzing Friction in Generalized Second Price Auctions," Workshop on Information Technology and Systems, Munich, Germany 2019.

Wang, W., Zheng, J., Kannan, K. N., Ren, F. "Estimate the Value of Destination Disclosure: A Dynamic Structural Model of Transportation Network," Workshop on Information Systems and Economics (WISE), Munich, Germany 2019.

Deng, Y., Zheng, J., Kannan, K. N., Khern-am-nuai, W. "More than the Quantity: Estimating the Value of Editorial Review for UGC Platform," International Conference on Information Systems (ICIS), Munich, Germany 2019.

Deng, Y., Zheng, J., Huang, L., Kannan, K. N. "The Impact of AI-powered Shelf Monitoring on Product Sales: Analysis of a Natural Experiment," Workshop on Information Systems and Economics (WISE), Munich, Germany 2019.

Deng, Y., Zheng, J., Kannan, K. N., Li, G. "When Donation Meets Reward: An Empirical Examination of Contribution Dynamics in Crowdfunding," Conference of Information Systems and Technology (CIST), Seattle, WA, United States 2019.

Hajime, S., Khern-am-nuai, W., Komayama, J., and Kannan, K. "Strategic Best Response Fair Algorithms," Conference of Information Systems and Technology (CIST), Seattle, WA, United States 2019.

Pamuru, V., Khern-am-nuai, W., and Kannan, K. "The Impact of Augmented Reality Games on Businesses: A Study of Pokemon-Go on Restaurants," SCECR 2019.

Wang, W., Zheng, J., Kannan, K. N., Ren, F., "Information Affecting Market Efficiency and Fairness: Estimating a Structural Model for Transportation Network," China Summer Workshop on Information Management (CSWIM), Shenzhen, China 2019.

Fang, Z., Zheng, J., Kannan, K. N., Yin, G. "Would Users Post More? A Hidden Markov Model of Reviewer Learning Dynamics in User-generated Content Platform," China Summer Workshop on Information Management (CSWIM), Shenzhen, China 2019.

Pamuru, V., Khern-am-nuai, W., and Kannan, K. "Pokémon Go and Local Businesses: An Empirical Study," Workshop on Information Systems and Economics (WISE), San Francisco, California 2018.

Deng, Y., Zheng, J., Kannan, K. N., Khern-am-nuai, W. "More than the Quantity: Estimating the Value of Editorial Review for UGC Platform," China Summer Workshop on Information Management (CSWIM), Qingdao, China 2018.

Kannan, K., Pamuru, V., and Rosokha, Y. "Efficiency of Generalized Second Price Auctions in Continuous Time," *Statistical Challenges in Electronic Commerce Research (SCECR)*, Rotterdam, Netherlands 2018

Kannan, K., Pamuru, V., and Rosokha, Y. "GSP Auctions with Market Frictions," *Conference on Information Systems and Technology (CIST)*, INFORMS, Phoenix, Arizona 2018

Ray, A., Ghasemkhani, H., and Kannan, K. "Adblockers, Advertisers & the Internet - The Economic Implications of AdBlocking," *ICIS* 2017.

Pamuru, V., Khern-am-nuai, W., and Kannan, K. "When Virtual Meets Real: The Effect of Pokémon Go on Local Restaurants," *ICIS* 2017.

Ghasemkhani, H., Khern-am-nuai, W., and Kannan, K. "Effect of Q&A on reviews," *WISE* 2017.

Ray, A., Ghasemkhani, H., and Kannan, K. "Extortionists or Digital Age Robin Hoods?" *CIST* 2017.

Pamuru, V., Khern-am-nuai, W., and Kannan, K. "When Virtual Meets Real: The Effect of Pokémon Go on Local Restaurants," *CIST* 2017.

Ghasemkhani, H., Khern-am-nuai, W., and Kannan, K. "Effect of Q&A on reviews," *Poster session, CIST* 2016.

Shimao, H., Khern-am-nuai, W., and Kannan, K. "So You Think You are Safe? Implications of Quality Uncertainty in Security Software," *Conference on Information Systems and Technology (CIST)* 2015.

Kannan, K., and Nguyen, T. "Competing Ad-Intermediaries and Welfare Implications," *Ad Auctions Workshop*, June 2014.

Zhang, N., Datta, S., and Kannan, K. "A Structural Model Analysis of Reward Structures on Kickstarter," *WISE* 2014.

Kannan, K., Rahman, M., and Tawarmalani, M. "Implications of Restricted Patch Distribution," *TEIS* 2013.

Hashim, M., and Kannan, K. "Collaboration, Interdependency, and Transfer Prices: An Experimental Analysis," *Workshop on Information Systems Economics (WISE)*, December 2012.

Hashim, M., and Kannan, K. "Collaboration, Interdependency, and Transfer Prices," *Experimental Science Association (ESA) Conference*, October 2012.

Hashim, M., and Kannan, K. "Information Targeting and Coordination in a Piracy Context," *Utah BI-Winter Conference*, March 2012.

Hashim, M., Kannan, K., and Maximiano, S. "Information Targeting and Coordination: An Experimental Study," *Workshop on Information Systems Economics (WISE)*, December 2011.

Chen, Y-F., Jana, R., and Kannan K. "Using Generalized Second Price Auction for Congestion Pricing," *IEEE Global Communication Conference*, December 2011.

Hashim, M., Kannan, K., and Maximiano, S. "Information Targeting and Coordination: An Experimental Study," *Proceedings of the Tenth Workshop on Economics of Information Security (WEIS)*, June 2011.

Overby, E., and Kannan, K. "Higher Revenue with the Same Demand: Distributing Buyer Demand via Lower Transactions Costs Online," *Workshop on Information Systems Economics (WISE)*, December 2010.

Dyaberi, J., Kannan, K., Pai, V., Chen, Y-F., Jana, R., Stern, D., and Wei, B. "Scholastic Streaming: Rethinking Mobile Video-On-Demand in a Campus Environment," *ACM Multimedia 2010 - Mobile Video Delivery (MoViD) Workshop*, October 2010.

Kannan, K., and Telang, R. "Analysis of Data Purge Policies," IT Security Workshop, University of Alberta, Edmonton, June 2010.

Dyaberi, J., Kannan, K., and Pai, V., "Storage Optimization for a Peer-to-Peer Video-on-Demand Network," *ACM Multimedia Systems*, February 2010.

Cason, T., Kannan, K. and Siebert, R. "Experimental Analyses on the Impact of Revelation Policies in Sequential Auctions with Cost Uncertainty," *Workshop on Information Systems Economics (WISE)*: Poster Session, December 2009.

Wang, T., Kannan, K., and Rees, J. "Investors' Perceptions on Information Security Incidents," *Workshop on Information Systems Economics (WISE)*, December 2008.

Wang, T., Rees, J., and Kannan, K. "Reading the Disclosures with New Eyes: Bridging the Gap between Information Security Disclosures and Incidents," *Proceedings of the Seventh Workshop on Economics of Information Security (WEIS)*, June 2008.

Kannan, K., and Siebert, R. "The Impact of Ex ante Licensing Contracts on Innovation: Evidence from the Semiconductor Industry," *Workshop on Information System Economics (WISE)*, December 2007.

Rahman, M., Kannan, K., and Tawarmalani, M. "The Countervailing Incentive of Restricted Patch Distribution: Economic and Policy Implications," *Proceedings of the Sixth Workshop on Economics of Information Security (WEIS)*, June 2007.

Balachander, S., and Kannan, K. "Auctioning Online Advertisements," *The First Annual International Symposium on Information Systems (ISIS)*, December 2006.

Zhang, G., Kannan, K., and Tan, Y. "Optimal Patching Effort against Internet Worms," *Proceedings of the Sixteenth Annual Workshop on Information Technology and Systems (WITS)*, December 2006.

Tawarmalani, M., Kannan, K., and De, P. "A Mechanism for Allocating Objects in a Network of Symmetric Caches," *Proceedings of the Tenth Annual Workshop on Information Technology and Systems (WITS)*, December 2005. (Received the best paper award; see also the Awards and Honors section.)

Kumar, C., Altinkemer, A., De, P., and Kannan, K. "A Pricing and Allocation Mechanism for Peer-to-Peer Networks," *Workshop on Information System Economics (WISE)*, December 2005.

Koo, S., Lee, G., and Kannan, K. "A Resource-trading Mechanism for Efficient Distribution of Large-volume Contents on Peer-to-Peer Networks," *Proceedings of the International Conference On Computer Communications and Networks (ICCCN)*, October 2005.

Koo, S., Lee, G., and Kannan, K. "An Incentive-compatible Capacity Assignment Algorithm for Bulk Data Distribution Using P2P," *Proceeding of the 24th Annual ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC)*, October 2005.

Tawarmalani, M., Kannan, K., De, P., and Kumar C. "Allocating Objects in a Network of Caches," *International Conference on Complementarity, Duality and Global Optimization in Science and Engineering (CDGO)*, August 2005.

Kannan, K., Rees, J. and Sridhar, S. "The Effects of Information Security Breach Announcements on Stock Prices: Long-term Impacts and the Role of Technology Bubble," *Proceedings of the Ninth INFORMS Conference on Information Systems and Technology (CIST)*, October 2004.

Koo, S., Kannan, K., and Lee, G. "A Genetic-Algorithm-Based Neighbor-Selection Strategy for Hybrid Peer-to-Peer Networks," *Proceedings of the International Conference On Computer Communications and Networks (ICCCN)*, October 2004: 469-474. (See also the Invited Publication section.)

Kannan, K., and Telang, R. "An Economic Analysis of the Market for Software Vulnerability Disclosure," *Proceedings of the Third Workshop on Economics of Information Security (WEIS)*, May 2004.

Greenwald, A., Kannan, K., and Krishnan, R., "A Computational Approach to Compare Information Revelation Policies," *Proceedings of the International Conference on Information Systems (ICIS)*, Seattle, December 2003: 706-719.

Greenwald, A., Kannan, K., and Krishnan, R. "Effect of Information Revelation Policies Under Market Structure Uncertainty," *Workshop on Information System Economics (WISE)*, December 2002.

Arora, A., Choudhary, V., Kannan, K., Krishnan, R. and Schneider, J. "Effect of Information Revelation Policies in a Web-Services Marketplace," *Proceedings of Computational Analysis of Social and Organizational Systems (CASOS)*, June 2002.

Arora, A., Choudhary, V., Kannan, K., Krishnan, R. and Padman, R. "Hierarchies Vs Markets: Using software agent marketplace," *Proceedings of Computational Analysis of Social and Organizational Systems (CASOS)*, June 2001.

Arora, A., Choudhary, V., Kannan, K., Krishnan, R. and Padman, R. "On Analyzing Interactions in a Software Agent Marketplace," *Proceedings of the Tenth Annual Workshop on Information Technology and Systems (WITS)*, December 2000. (Received the best paper award; see also the Awards and Honors section.)

## **INVITED TALKS/WORKSHOPS**

"Decision-Making When Experimentation is costly and with Vague Causal Information"

Facebook 2019

“Welfare Implications of Intermediaries”

Temple University 2019, University of South Florida 2019

“GSP Auction: Experiment and Computational Model” (differing titles used)

University of Texas at Dallas, November 2018; Michigan State University 2018; and McGill 2018

“Amazon Q&A and its implications”

Carnegie Mellon University, March 2017

“Analysis of Payments for Reviews on Online Platform”

University of Illinois, Urbana-Champaign, September 2014; Indiana University, Bloomington, April 2015; University of Texas at Austin, August 2015; Texas A&M April 2017.

“A Structural Model Analysis of Reward Structures on Kickstarter,” SMART August 2014.

“Cardinality Bundling with Spence-Mirelees Reservation Prices”:

UC Irvine, May 2014; Boston University, April 2014; University of Utah, April 2014; ISB, March 2014; University of Arizona, 2014; University of Florida, April 2015; Amazon 2018.

“Implications of Restricted Patch Distribution”:

Notre Dame Big 10 Symposium May 2013; Temple University, August 2013; Southern Methodist University, August 2013; University of Rochester, NY, August 2013; Erasmus University, July, 2013; UCSD April, 2013; ISB, March, 2013.

“Data Mining and Experimental Economics in Information Security Research,” Ninth Forum for Financial Information Systems and Cybersecurity: A Public Policy Perspective, *University of Maryland at College Park*, January 15<sup>th</sup>, 2013.

“Information Targeting and Coordination: An Experimental Study:”

Georgia Institute of Technology, January 2012; University of Illinois, Urbana Champaign, October 2011; University of Maryland, College Park, April 2011; Seattle, October 29<sup>th</sup>, 2010

Cyber Security Through a Behavioral Lens Workshop Scottsdale, AZ, July 2<sup>nd</sup>, 2011.

CIBER International Doctoral Consortium (faculty advisor), Seattle, Washington 2011.

“Higher Revenue with the Same Demand: Distributing Buyer Demand via Lower Transactions Costs Online,” INFORMS 2010.

Cyber Security Through a Behavioral Lens Workshop in the Capitol Hill, Washington DC, 2010.

“Analysis of Data Purge Policies,” University of Alberta, Edmonton, June 5<sup>th</sup>, 2010.

“Experimental Analyses on the Impact of Revelation Policies in Sequential Auctions with Cost Uncertainty:”

University of Connecticut, Storrs, April 9<sup>th</sup>, 2010; University of Calgary, Calgary, March 16<sup>th</sup>, 2010; University of Notre Dame University MIS Research Symposium, South Bend, May 8<sup>th</sup>, 2009; Carnegie Mellon University, Pittsburgh, January 30<sup>th</sup>, 2009; University of Washington, Seattle, October 31<sup>st</sup>, 2008.

“Prepositioning Video Content in a Peer-to-Peer Network,” AT&T Labs Research, Morristown, July 30<sup>th</sup>, 2009.

“Auctions in Electronic Market Contexts,” Annual Big 10 MIS Consortium, Indiana University, Bloomington, May 2<sup>nd</sup>, 2009.

“The Impact of Information Security Disclosures on Market Reactions to Security Breaches,” Georgia Institute of Technology, Atlanta, September 25<sup>th</sup>, 2008.

“Allocating Objects in a Network of Caches: Centralized and Decentralized Analyses,”

University of Minnesota, Minneapolis, February 21<sup>st</sup>, 2008; INFORMS 2006.

“Effects of Revelation Policies under Cost Structure Uncertainty,”

University of Texas at Dallas, September 21<sup>st</sup>, 2007; INFORMS 2004.

“Markets for Vulnerabilities? Think Again,” University of Illinois, Urbana-Champaign, April 8<sup>th</sup>, 2005.

“A Computational Approach to Compare Information Revelation Policies,”

University of Illinois, Chicago, April 1<sup>st</sup>, 2005; DIS Workshop, University of Florida, February 24<sup>th</sup>, 2005.

“Economic Analysis of Market for Information Security,” INFORMS 2004.

## **SPONSORED ACTIVITIES**

Principal Investigator (Ilias Bilinois as the Co-PI), Facebook “Data Driven Decision Making When Experimentation is Costly,” \$65,000.

Co-Principal Investigator (with Jitesh Panchal as the PI), NSF, “Understanding Information Acquisition Decisions in Systems Design through Behavioral Experiments and Bayesian Analysis,” July 2017-June 2020, \$650,000.

Co-Principal Investigator (with Jitesh Panchal as the PI), NSF, “Crowdsourcing for Engineering Systems Design: Theoretical and Experimental Studies,” July 2014-June 2019, \$400,000.

Principal Investigator, AT&T Labs, “Pricing in Data Networks,” July 2011 – April 2012, \$50,000.

Co-Principal Investigator (with Vijay Pai as the PI), AT&T Labs, “Peer-to-Peer Strategies for a VOD Content Distribution Network,” July 2009 – April 2010, \$25,000.

Principal Investigator, (with Jackie Rees as another PI and Eugene Spafford as a Co-PI), McAfee Inc., “Unsecured Economies,” June 2008 – Jan. 2009, \$45,000.

## **TEACHING**

Designing for human instincts, MBA elective course: Offered for the full-time MBA at Purdue University in Module 2 of fall 2012, 2013, 2014, 2015 and 2016, and 2020; for the weekend MBA at Purdue University in Module 4 of spring 2016, 2017, 2018, 2019, and 2020; Offered at ISB in Term 8 in Spring 2013, 2014, 2015, and 2016; and Term 6 in Fall 2018, and 2019; Design thinking for operations: taught at Purdue for students visiting from SP Jain. In the Executive MBA program (cohort elective): Module 3 of Spring 2017 and 2019.

IT for Managers (formerly, Management Information Systems; MGMT 683): MBA course, Purdue University. In the 2-year MBA program (core): Module 4 of Spring 2006, 2007, and 2008; Module 3 of 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, and 2020. In the 1-year program (core): Module 1 of Spring 2014, 2015, 2016, and 2017. In the weekend MBA program (cohort elective): Module 3 of Spring 2009, 2010, 2011, 2012, 2013, and 2014. In the weekend MBA (core): Summer of 2017; Module 1 of Fall 2017, 2018, 2019, and 2020. In the Executive MBA program (cohort elective): Module 3 of Spring 2013, 2014, 2015, 2016, 2019, and 2020. In the IMM Global Executive MBA program: Module 6 of Spring 2015, 2016, 2017, and 2018.

Introduction to Management Information Systems (MGMT 382; formerly, MGMT 482): Undergraduate core course, Purdue University. Summer and Fall 2004, Summer 2005, Fall 2006, Summer 2008, Summer 2009, Fall 2009, Fall 2011, Fall 2012.

Database Management (MGMT 544), Purdue University. Spring 2004.

Doctoral Research Seminar in MIS (MGMT 690M): Purdue University. Fall 2003, 2005, and 2007, 2009, 2011, 2012, 2014, 2016, and 2018.

E-Commerce Technologies (95-729): MISM elective, Carnegie Mellon University. Summer 2002, Fall 2001, and Summer 2001.

E-Commerce (Co-taught with Professor Mike Smith; handled the technology component of the course; 95-730): MISM core course, Carnegie Mellon University. Spring 2000.

## TEACHING CASE

Case: Johnsen, R., and Kannan, K. (2010) "Knowledge Management at Cap Gemini Ernst & Young (Abridged)," *IESE Publishing*. This is an abridged version of the case by Andreu, Lara, and Sieber with the title "Knowledge Management at Cap Gemini Ernst & Young."

## PROFESSIONAL ACTIVITIES

Panel chair in POMS 2017, POMS 2018, CIST 2017.

Track co-chair for Economics of Information Systems in *International Conferences on Information Systems*, 2016

Associate Editor for *Information Systems Research* (January 2010 – December 2012), *MIS Quarterly* (January 2012 – December 2013), and *Management Science* (January 2011 – till date). Associate Editor for a special issue in *Information Systems Research*.

Co-Chair for *Conference on Information Systems and Technology (CIST)* in 2010 with Anitesh Barua and Yong Tan; for *Workshop on Information Systems and Economics (WISE)* in 2012 with Tridas Mukhopadhyay, Param Singh, Mike Smith, and Rahul Telang.

Associate Editor for *International Conference on Information Systems (ICIS)* 2009, 2011, 2012, 2013, 2014; *Pacific Asia Conference on Information Systems (PACIS)* 2009.

Editorial review board member for *Journal of Database Management* May 2005 – April 2009.

Reviewer for *Management Science*, *Information Systems Research*, *International Journal of Electronic Commerce*, *Information Technology and Management*, *Decision Support Systems*, *Journal of Management Information Systems*, *Journal of Association of Information Systems*, *European Economic Review*, *Workshop on Information Technology and Systems (WITS)*, *International Conference on Information Systems (ICIS)*, and *Americas Conference on Information Systems (AMCIS)*.

Program committee member for *Conference on Information Systems and Technology (CIST)* 2005, 2006, 2007, 2008, 2009, 2011, 2013, 2014; *International Conference on Information Systems, Technology and Management (ICISTM)* 2007, 2008, 2009; *International Symposium of Information Systems (ISIS)* 2006, 2007; *World Wide Web*, 2008; and *Workshop on Economics of Information Security (WEIS)* 2008; *Workshop on Information Technology and Systems (WITS)* 2005, 2006, 2007, 2008, 2009, 2014.

Member of INFORMS, AIS, and POMS.

## SERVICES

### University Level

Integrated Data Science Initiative, Steering Committee, 2017-

Data Science Initiative, Faculty Representative, 2017-18

Search Committee: Executive Director for IT and Network Services, 2011-2012

ITNS Oversight Committee, 2010-2011

### School Level

Online MBA committee, 2017-2020

Director for Krenicki Center for BA and ML (formerly, Business Information and Analytics Center), 2018-till date.

Co-director for Business Information and Analytics Center, 2015-2018

Management Executive Council, 2015-2017

Academic Director for MBA, 2016-2018

Academic Co-Director for MS BAIM, 2015-2018

Co-Chair for MS in BAIM Program, 2013-2018

MBA Review Committee, 2014-15

Master's web promotion initiative, 2010-2012  
DCCME/GSCM Advisory Committee, 2009-2010  
ByTE club, faculty advisor, 2012-14  
Grievance Committee, 2003-2009  
IT Committee, 2004-2005

#### MIS Area Level

Area head: 2015-16 (served as a co-head); 2016-2018  
Doctoral Student Admissions Committee, 2004-till date  
Recruiting Committee at Purdue, 2005, 2011 (for a visiting professor) 2012, 2013;  
Search chair in 2015, 2016, and 2017  
Course content review committees: MGMT 683 (2005-till date); MGMT 382 formerly, 482 (2005-2009)  
Ph.D. Program Coordinator: 2003-2005 & 2010-2011 (served as a co-coordinator); 2011- 2013.

#### **AWARDS AND HONORS**

Runner up Best Paper Award, WITS 2019  
Best Workshop Paper, CSWIM 2019  
Runner up Best Paper Award, *ISR*, 2018  
Notable contribution to the literature, American Accounting Association, AIS Section, 2018  
Finalist for Best Paper Award in *Management Science*, 2018  
Purdue Insights Forum Fellow, 2018.  
Jefferson Science Fellow, 2017.  
Teaching Innovation Grant Award, 2015.  
DCMME/GSCMI DeVos Award (Co-winner), 2011-2012.  
Krannert Faculty Fellow Award, 2010.  
*Management Science* Meritorious Service Award, 2010.  
CERIAS Fellow since 2009.  
PRF International Travel Grant, 2008.  
Best Reviewer Award (Co-winner), *Information Systems Research*, 2007.  
DCMME/GSCMI DeVos Award (Co-winner), 2006-2007.  
CIBER International Travel Award, Spring 2006.

Best Paper Award, The 15<sup>th</sup> Annual Workshop on Information Technology and Systems, Las Vegas, 2005.

John and Mary Willis, Young Faculty Award, Krannert School of Management, Purdue University, 2005.

Nominated for the 1<sup>st</sup> International Doctoral Consortium, Delft, Netherlands, 2002.

Member of the Electrical Engineering honor society, Eta Kappa Nu, since 2002.

Best Paper Award, The 10<sup>th</sup> Annual Workshop on Information Technology and Systems, Brisbane, 2000.

Best “Y2k” Project, Infosys Technologies, India, 1998.

Distinguished Core Course Teacher in the MBA program at Purdue University for Module 4 of Spring 2006, 2007, and 2008; and Module 3 of Spring 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2018, and 2019.

Distinguished Elective Course Teacher in the MBA program at Purdue University for Module 2 of Fall 2012, 2013 and 2014; Module 3 of 2016, and 2017.

## **MEDIA AND OTHER NON-ACADEMIC INVITATIONS**

### Education

<https://www.analyticsinsight.net/interview-with-karthik-kannan-director-of-business-information-analytics-center-at-purdues-krannert-school-of-management/>

<https://www.usnews.com/education/best-graduate-schools/top-business-schools/articles/2018-01-11/ask-these-questions-about-how-mba-programs-are-taught>

<https://www.purdue.edu/newsroom/releases/2018/Q3/purdue-offers-two-year-concurrent-masters-degrees-in-engineering-and-management.html>

<https://bized.aacsb.edu/articles/2019/january/business-education-in-a-jetsons-world>

### Facebook

<http://www.econtentmag.com/Articles/News/News-Feature/Lessons-Learned-from-the-Facebook-Data-Scandal-125346.htm>

<https://www.purdue.edu/newsroom/releases/2018/Q3/discounts-for-data-californias-internet-privacy-law,-the-strictest-in-the-country,-has-far-reaching-implications.html>

### California Data protection law

<http://www.econtentmag.com/Articles/News/News-Feature/How-the-California-Consumer-Privacy-Act-May-Impact-the-Digital-Media-Industry-126518.htm>

<http://www.homelandsecuritynewswire.com/dr20180703-california-s-strict-internet-privacy-law-has-far-reaching-implications>

### Research on Pokemon Go

<http://www.ssuchronicle.com/2017/10/03/augmented-reality-apps-cause-restaurant-profits-to-rocket/>

<http://www.krannert.purdue.edu/konline/2018s/features/pokemon1.php>

Digital Transformation:

<https://www.alvexo.com/blog/business/business-trends-2018-year-machines-rise/>

<https://amp.jconline.com/amp/878917002>

<https://www.axios.com/tag/convenience-stores/>

Alternate crypto currency model:

<https://www.cnet.com/news/youtube-star-phil-defranco-cryptocurrency-props-wants-a-payday-for-you/>

<https://www.ibj.com/articles/69038-innovation-issue-theres-promise-in-cryptocurrencies-but-plenty-of-skepticism-too>

Amazon HQ2

<http://www.wlfi.com/content/news/What-benefits-would-an-Indy-Amazon-HQ-have-for-Greater-Lafayette-470060503.html>

On cryptocurrency sell-off: <https://www.cnet.com/news/cryptocurrency-bitcoin-faces-more-growing-pains-amid-another-sell-off/>

“Big Data to Better Decisions,” GS1 Exposition, Lima (Peru), October 2017.

“Digital Transformations and Nature of Future Work,”

Back to School Program, Purdue University, October 2017. WALLA (Wabash Area Lifetime Learning Association), March 2018.

“Digital Transformations and Nature of Future Work,” GE (Telepresence), September 2017.

“Digital Transformations,” GE (Boston), February 2017.

“What to expect from Future Businesses: Design for Instincts,” Caterpillar, April 2014.

“Driving Innovation Through Gamification,” Cognizant Technology Solutions, Innovation Week, March 2013.

Quoted in an article written by U.S. Department of State’s International Bureau of International Information Programs (2009). “Low-Risk, High-Profit Opportunities Drive Up Cybercrime.”

Quoted in Forbes. (2009). “Putting a Price on CyberSpying.”

Unsecured Economies Report, the McAfee Inc. sponsored study, cited by the White House (2009, p.2). “Assuring a Trusted and Resilient Information and Communications Infrastructure.”

## **DOCTORAL STUDENT ADVISING**

Sameer Borwankar (Chair), Krannert School of Management, Purdue University.

Yipu Deng (Co-chair), Krannert School of Management, Purdue University.

Ashish Chaudhary (Dissertation Committee), Mechanical Engineering Department, Purdue University. Graduated 2020 (initial placement: post-doc at Texas A&M)

Salar Safarkhani (Dissertation Committee), Mechanical Engineering Department, Purdue University. Graduated 2020 (initial placement: post-doc at Purdue University)

Murtuza Shergadwala (Dissertation Committee), Mechanical Engineering Department, Purdue University. Graduated 2020 (initial placement: post-doc)

Vandith Pamuru (Chair), Krannert School of Management, Purdue University. Graduated 2020 (Initial placement: assistant professor at Indian School of Business)

Abhishek Ray (Chair), Krannert School of Management, Purdue University. Graduated 2019 (Initial placement: assistant professor at George Mason University).

Zhenghui Sha (Dissertation Committee), Mechanical Engineering Department, Purdue University. Graduated 2015 (initial placement: post-doc at Northwestern University; assistant professor at University of Arkansas)

Warut Khern-am-nuai (Chair), Krannert School of Management, Purdue University. Graduated 2016 (Initial placement: assistant professor at McGill University).

Na Zhang (Co-Chair), Krannert School of Management, Purdue University. Graduated 2015 (Initial placement: Data Analyst at Amazon).

Jianqing Wu (Co-Chair), Krannert School of Management, Purdue University. Graduated 2014 (Initial placement: assistant professor at University of Washington).

Rajiv Mukherjee (Dissertation Committee), UT Austin. Graduated 2013 (Initial placement: assistant professor at Southern Methodist University).

Matthew Hashim (Co-Chair), "Nudging the Digital Pirate: Piracy and the Conversion of Pirates to Paying Customers," Krannert School of Management, Purdue University. Graduated 2011 (Initial placement: assistant professor at University of Arizona).

Jagadeesh Dyaberi (Dissertation Committee), Electrical and Computer Engineering, Purdue University. Graduated 2011 (Initial placement: saavn.com).

Ta-wei Wang (Co-Chair), "Essays on Information Security from an Economic Perspective," Krannert School of Management, Purdue University. Graduated 2009 (Initial placement: faculty member National Taiwan University).

Mohammad Rahman (Dissertation Committee), "A Study Of the Effects of Low Search Cost Online: How Product Selection Technology Usage and Spatiality Drive Consumer Demand," Krannert School of Management, Purdue University. Graduated 2008 (Initial placement: assistant professor at University of Calgary).

Chetan Kumar (Co-Chair), "Essays on Peer-to-Peer Resource Allocation and Caching Mechanisms in Computer Networks," Krannert School of Management, Purdue University. Graduated 2006 (Initial placement: assistant professor California State University, San Marcos).

Simon Koo (Co-Chair), “Bulk Content Distribution Using Peer-to-Peer Overlay: Design and Analysis,” Electrical and Computer Engineering, Purdue University. Graduated 2006 (Initial academic placement: assistant professor at San Diego University).