# BENJAMIN B. M. SHAO

**BAC 678** 

Department of Information Systems W. P. Carey School of Business Arizona State University Tempe, AZ 85287-4606

Tel: (480)727-6790; Fax: (480)727-0881

E-mail: ben.shao@asu.edu

### RESEARCH INTERESTS

IT Impacts, Data Analytics, Digital Platforms, IS Security, Healthcare IT, and IS/OM Interface

## **TEACHING INTERESTS**

Strategic Value of Information Technology, Digital Innovations and Transformation, Database Management Systems, Network Distributed Systems, and Information Systems Security

## **EDUCATION**

Ph.D. in Management Information Systems, State University of New York at Buffalo, 2000

M.S. in Information Management, National Chiao Tung University, Hsinchu, Taiwan, 1991

B.S. in Computer and Information Science, National Chiao Tung University, Hsinchu, Taiwan, 1989

### **ACADEMIC EXPERIENCE**

### W. P. Carey School of Business, Arizona State University

July 2021 - Present	Associate Dean for Asia-Pacific Programs and Initiatives
Jan 2020 - June 2021	Interim Associate Dean for China Programs
Aug 2019 - Present	Professor of Information Systems
Jan 2017 - Present	Co-Director of the Digital Society Initiative (DSI)
Aug 2019 - July 2020	Faculty Director for the MSISM Program
Aug 2018 - Aug 2019	Associate Department Chair
Aug 2006 - Aug 2019	Associate Professor of Information Systems
Aug 1999 - Aug 2006	Assistant Professor of Information Systems

### **WORK EXPERIENCE**

# School of Management, State University of New York at Buffalo

Aug 1997 - May 1999 Instructor Aug 1994 - May 1998 Graduate Assistant

## Institute of Information Science, Academia Sinica, Taipei, Taiwan

July 1993 - July 1994 Research Assistant

### National Defense Medical Center, Taipei, Taiwan

Aug 1991 - May 1993 Second Lieutenant Comptroller

## RESEARCH

## **Journal Papers**

- 1. Kao, T.W., Zhang, L., Shao, B.B.M., and Choi, T. "Social Ties Among Fundraisers and Crowdfunding Performance: The Impact of Tie Strength and Network Closure," *Journal of Management Information Systems* (forthcoming), 2024.
- 2. Chou, Y.C. and Shao, B.B.M. "An Empirical Study of Information Technology Capabilities to Enable Value Chain Activities and Interfaces," *Information Systems Frontiers* 25(4), 1533-1547, 2023.
- 3. Liang, C., Hong, Y., Chen, P., and Shao, B.B.M. "The Screening Role of Design Parameters for Service Procurement Auctions in Online Service Outsourcing Platforms," *Information Systems Research* 33(4), 1324-1343, 2022.
- 4. Shao, B.B.M., St. Louis, R., Corral, K., and Li, Z., "Best Practices for Leveraging Data Analytics in Procurement," *MIS Quarterly Executive* 21(2), Article 4, 131-142, 2022.
- 5. Hong, Y.K. and Shao, B.B.M., "On Factors that Moderate the Effect of Buyer-Supplier Experience on E-Procurement Platforms," *Production and Operations Management* 30(4), 1034-1051, 2021.
- 6. Li, Z., Shao, B.B.M., and Goul, M., "A Model of Two-Zoned Network for Platform Competition," *Decision Support Systems* 146(1), 113547, 1-13, 2021.
- 7. Chou, Y.C. and Shao, B.B.M., "Adoption and Performance of Mobile Sales Channel for e-Retailers: Fit with m-Retail Characteristics and Dependency on e-Retailing," *Information Systems Frontiers* 23(3), 681-694, 2021.
- 8. Shao, B.B.M., Shi, Z.M., Choi, T., and Chae, S., "A Data-Analytics Approach to Identifying Hidden Critical Suppliers in Supply Networks: Development of Nexus Supplier Index," *Decision Support Systems* 114(1), 37-48, 2018.
- 9. Lee, G.W., Shao, B.B.M., and Vinze, A., "The Role of ICT as a Double-Edged Sword in Fostering Societal Transformations," *Journal of the Association for Information Systems* 19(3), 209-246, 2018.
- 10. Shao, B.B.M., Lin, W.T., and Tsai, J.Y., "An Empirical Study of the Telecommunications Service Industries Using Productivity Decomposition," *IEEE Transactions on Engineering Management* 64(4), 437-449, 2017.
- 11. Cazier, J.A., Shao, B.B.M., and St. Louis, R.D., "Value Congruence, Trust, and Their Effects on Purchase Intention and Reservation Price," *ACM Transactions on Management Information Systems* 8(4), Article 13, 1-28, 2017.
- 12. Kao, T.W., Simpson, N.C., Shao, B.B.M., and Lin, W.T., "Relating Supply Network Structure to Productive Efficiency: A Multi-Stage Empirical Investigation," *European Journal of Operational Research* 259(2), 469-485, 2017.
- 13. Chou, Y.C., Chuang, H.C., and Shao, B.B.M., "The Impact of E-Retail Characteristics on Initiating Mobile Retail Services: A Modular Innovation Perspective," *Information & Management* 53(4), 481-492, 2016.
- 14. Shao, B.B.M. and Lin, W.T., "Assessing Output Performance of Information Technology Service Industries: Productivity, Innovation and Catch-up," *International Journal of Production Economics* 172(1), 43-53, 2016.
- 15. Choi, T., Shao, B.B.M., and Shi, Z.M., "Hidden Suppliers Can Make or Break Your Operations," *Harvard Business Review* (digital article <a href="https://hbr.org/2015/05/hidden-suppliers-can-make-or-break-your-operations">https://hbr.org/2015/05/hidden-suppliers-can-make-or-break-your-operations</a>), May 29, 2015.
- 16. Chou, Y.C., Chuang, H.C., and Shao, B.B.M., "Information Initiatives of Mobile Retailers: A Regression Analysis of Zero-truncated Count Data with Under-dispersion," *Applied Stochastic Models in Business and Industry* 31(4), 457-463, 2015.

- 17. Glassman, J., Prosch, M., and Shao, B.B.M., "To Monitor or Not to Monitor: Effectiveness Analysis of a Cyberloafing Countermeasure," *Information & Management* 52(2), 170-182, 2015.
- 18. Lin, W.T., Chen, Y.H., and Shao, B.B.M., "Assessing the Business Values of e-Commerce and Information Technology Independently and Jointly," *European Journal of Operational Research* 245(3), 815-827, 2015.
- 19. Chou, Y.C. and Shao, B.B.M., "Total Factor Productivity Growth in Information Technology Services Industries: A Multi-Theoretical Perspective," *Decision Support Systems* 62(1), 106-118, 2014.
- 20. Chou, Y.C., Chuang, H.C., and Shao, B.B.M., "The Impacts of Information Technology on Total Factor Productivity: A Look at Externalities and Innovations," *International Journal of Production Economics* 158(1), 290-299, 2014.
- 21. Shao, B.B.M., Yin, P.Y., and Chen, A.N.K., "Organizing Knowledge Workforce for Specified Iterative Software Development Tasks," *Decision Support Systems* 59(1), 15-27, 2014.
- 22. Tsai, J.Y., Raghu, T.S. and Shao, B.B.M., "Information Systems and Technology Sourcing Strategies of E-Retailers for Value Chain Enablement," *Journal of Operations Management* 31(6), 345-362, 2013.
- 23. Chou, Y.C., Shao, B.B.M., and Lin, W.T., "Performance Evaluation of Production of IT Capital Goods across OECD Countries: A Stochastic Frontier Approach to Malmquist Index," *Decision Support Systems* 54(1), 173-184, 2012.
- 24. Furukawa, M., Raghu, T.S., and Shao, B.B.M., "Electronic Medical Records, Nurse Staffing, and Nurse-Sensitive Patient Outcomes: Evidence from the National Database of Nursing Quality Indicators," *Medical Care Research & Review* 68(3), 311-331, 2011.
- 25. Cazier, J.A., Shao, B.B.M., and St. Louis, R.D., "The Business Value of Green IT in Price Premiums," *Journal of Strategic Innovation and Sustainability* 6(4), 9-16, 2010.
- 26. Furukawa, M., Raghu, T.S., and Shao, B.B.M., "Electronic Medical Records, Nurse Staffing, and Nurse-Sensitive Patient Outcomes: Evidence from California Hospitals, 1998-2007," *Health Services Research* 45(4), 941-962, 2010.
- 27. Furukawa, M., Raghu, T.S., and Shao, B.B.M., "Electronic Medical Records and Cost Efficiency in Hospital Medical-Surgical Units," *Inquiry* 47(2), 110-123, 2010.
- 28. Keith, M., Shao, B.B.M., and Steinbart, P., "A Behavioral Analysis of Passphrase Design and Effectiveness," *Journal of the Association for Information Systems* 10(2), 63-89, 2009.
- 29. Yin, P.Y., Shao, B.B.M., Cheng, Y.P., and Yeh, C.C., "Metaheuristic Algorithms for Task Assignment in Distributed Computing Systems: A Comparative and Integrative Approach," *The Open Artificial Intelligence Journal* 3(1), 16-26, 2009.
- 30. Vroblefski, M., Chen, A.N.K., Shao, B.B.M., and Swinarski, M., "Managing User Relationships in Hierarchies for Information System Security," *Decision Support Systems* 43(2), 408-419, 2007.
- 31. Cazier, J.A., Shao, B.B.M., and St. Louis, R.D., "Sharing Information and Building Trust through Value Congruence," *Information Systems Frontiers* 9(5), 515-529, 2007.
- 32. Shao, B.B.M. and David, J.S., "The Impact of Offshore Outsourcing on IT Workers in Developed Countries," *Communications of the ACM* 50(2), 89-94, 2007 (reprinted in *IT Management Select* 13(3), 10-17, 2007).
- 33. Keith, M., Shao, B.B.M., and Steinbart, P., "The Usability of Passphrases for Authentication: An Empirical Field Study," *International Journal of Human-Computer Studies* 65(1), 17-28, 2007.
- 34. Chen, A.N.K., Sen, S., and Shao, B.B.M., "Strategies for Effective Web Services Adoption for Dynamic E-Businesses," *Decision Support Systems* 42(2), 789-809, 2006.
- 35. Shao, B.B.M. and Rao, H.R., "A Parallel Hypercube Algorithm for Discrete Resource Allocation Problems," *IEEE Transactions on Systems, Man, and Cybernetics A* 36(1), 233-242, 2006.
- 36. Cazier, J.A., Shao, B.B.M., and St. Louis, R.D., "E-Business Differentiation through Value-Based Trust," *Information & Management* 43(6), 718-727, 2006.

- 37. Lin, W.T. and Shao, B.B.M., "Assessing Input Effect on Productive Efficiency in Production Systems: The Value of Information Technology Capital," *International Journal of Production Research* 44(9), 1799-1819, 2006.
- 38. Lin, W.T. and Shao, B.B.M., "The Business Value of Information Technology and Input Substitution: The Productivity Paradox Revisited," *Decision Support Systems* 42(2), 493-507, 2006.
- 39. Chen, A.N.K., Hwang, Y., and Shao, B.B.M., "Measurement and Sources of Overall and Input Inefficiency: Evidences and Implications in Hospital Services," *European Journal of Operational Research* 161(2), 447-468, 2005.
- 40. Shao, B.B.M., "Optimal Redundancy Allocation for Information Technology Disaster Recovery in the Network Economy," *IEEE Transactions on Dependable and Secure Computing* 2(3), 262-267, 2005.
- 41. Shao, B.B.M. and Shu, W.S., "Productivity Breakdown of the Information and Computing Technology Industries across Countries," *Journal of the Operational Research Society* 55(1), 23-33, 2004.
- 42. Chen, M., Chen, A.N.K., and Shao, B.B.M., "The Implications and Impacts of Web Services to Electronic Commerce Research and Practices," *Journal of Electronic Commerce Research* 4(4), 128-139, 2003.
- 43. Chen, A.N.K., LaBrie, R.C., and Shao, B.B.M., "An XML Adoption Framework for Electronic Business," *Journal of Electronic Commerce Research* 4(1), 1-14, 2003.
- 44. Shao, B.B.M. and Lin, W.T., "Technical Efficiency Analysis of Information Technology Investments: A Two-Stage Empirical Investigation," *Information & Management* 39(5), 391-401, 2002.
- 45. Shao, B.B.M. and Lin, W.T., "Measuring the Value of Information Technology in Technical Efficiency with Stochastic Production Frontiers," *Information and Software Technology* 43(7), 447-456, 2001.
- 46. Shao, B.B.M. and Rao, H.R., "A Comparative Analysis of Information Acquisition Mechanisms for Discrete Resource Allocation," *IEEE Transactions on Systems, Man, and Cybernetics A* 31(3), 199-209, 2001.
- 47. Shao, B.B.M. and Lin, W.T., "Examining the Determinants of Productive Efficiency with IT as a Production Factor," *Journal of Computer Information Systems* 41(1), 25-30, 2000.
- 48. Lin, W.T. and Shao, B.B.M., "The Relationship between User Participation and System Success: A Simultaneous Contingency Approach," *Information & Management* 37(6), 283-295, 2000.
- Lin, W.T. and Shao, B.B.M., "Relative Sizes of Information Technology Investments and Productive Efficiency: Their Linkage and Empirical Evidence," *Journal of the Association for Information Systems* 1(7), 1-35, 2000.
- 50. Shao, B.M., Hwang, J.J., and Wang, P.C., "Distributed Assignment of Cryptographic Keys for Access Control in a Hierarchy," *Computers & Security* 13(1), 79-84, 1994.
- 51. Hwang, J.J., Shao, B.M., and Wang, P.C., "A New Access Control Method Using Prime Factorization," *The Computer Journal* 35(1), 16-20, 1992.

### **Conference Proceedings**

- 1. Ware, T., T.S. Raghu, and Shao, B.B.M., "Algorithmic Decision Delegation: A Choice Avoidance Perspective" in Proceedings of the 28<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 10-14, 2022, Minneapolis, MN.
- 2. Ware, T., T.S. Raghu, and Shao, B.B.M., "Algorithmic Decision Delegation: A Choice Avoidance Perspective" in Proceedings of the 28<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 10-14, 2022, Minneapolis, MN.

- 3. Ware, T., T.S. Raghu, and Shao, B.B.M., "Algorithmic Decision Delegation: A Choice Avoidance Perspective" in Proceedings of the PhD Project Baruch College Research Symposium, April 28-29, 2022, New York, NY.
- 4. Ware, T., T.S. Raghu, and Shao, B.B.M., "How a Country's Socio-Economic and Political Environments Influence AI Perception" in Proceedings of the 20th Workshop on e-Business (WeB), Austin TX, December 11, 2021, Austin, TX.
- 5. Ware, T., Raghu, T.S., and Shao, B.B.M., "Investigating the Role of Socio-economic and Political Environments on AI Perception" in Proceeding of the Harvard Business School Rising Scholars Conference, October 20-21, 2021, Boston, MA.
- 6. Li, Z., Shao, B.B.M., and Goul, M., "A Model of Two-Zoned Networks for Platform-Mediated Markets," in Proceedings of the 53<sup>rd</sup> Hawaii International Conference on System Sciences (HICSS), January 5-8, 2020, Grand Wailea, Maui (Finalist for the Best Paper Award in the Organizational Systems and Technology Track).
- 7. Glassman, J., Shao, B.B.M., and St. Louis, R., "Don't Get the Cart before the Horse: There Are No Shortcuts to Prescriptive Analytics," in Proceedings of the 52<sup>nd</sup> Hawaii International Conference on System Sciences (HICSS), January 8-11, 2019, Grand Wailea, Maui.
- 8. Hong, Y., Shao, B.B.M., Chen, P.-Y., and Liang, C. "Auction Parameters and Bidder Entry: Evidence from Online Outsourcing Platforms," in Proceedings of the 28<sup>th</sup> Workshop on Information Systems and Technology (WITS), December 16-18, 2018, Santa Clara, CA.
- 9. Hong, Y., Shao, B.B.M., Chen, P.-Y., and Liang, C. "Effect of Auction Design on Bidder Entry: Evidence from an Online Labor Market," in Proceedings of the 51<sup>st</sup> Hawaii International Conference on System Sciences (HICSS), January 2-6, 2018, Waikoloa, HI.
- 10. Li, Z. and Shao, B.B.M. "A Theory of Two-Zoned Networks for Platform-Mediated Markets," in Proceedings of the 22<sup>nd</sup> AIS Americas Conference on Information Systems (AMCIS), August 11-14, 2016, San Diego, CA.
- 11. Kao, T.W., Simpson, N.C., Shao, B.B.M., and Lin, W.T., "Analyzing Firm- and Chain-Level Productive Efficiencies in Supply Networks: A Two-Stage Empirical Investigation," The Academy of Management Annual Meeting, August 7-11, 2015, Vancouver, Canada (Finalist for the Institute for Supply Management Best Paper Award).
- 12. Glassman, J, Prosch, M., and Shao, B.B.M., "Active Real Time Internet Usage Warnings: A Countermeasure for Cyberloafing," The Annual Security Conference, April 10-12, 2013, Las Vegas, NV.
- 13. Glassman, J, Prosch, M., and Shao, B.B.M., "Active Real Time Internet Usage Warnings: A Countermeasure for Cyberloafing," The 10<sup>th</sup> Workshop on E-Business (WeB), December 15, 2012, Orlando, FL.
- 14. Lee, G.W., Shao, B.B.M., and Vinze, A., "Socioeconomic and Sociopolitical Transformations through Information and Communication Technologies: Evidence from Transition Economies," in Proceedings of the International Conference on ICT Management (ICTM), September 17-18, 2012, Wroclaw, Poland.
- 15. Lee, G.W., Shao, B.B.M., and Vinze, A., "The Role of Information and Communication Technologies in Transition Economies," in Proceedings of the 18<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 9-11, 2012, Seattle, WA.
- 16. Chou, Y.C. and Shao, B.B.M., "From E-commerce to M-commerce: Business Value of Mobile Sales Channel," the INFORMS Annual Meeting 2012, October 14-17, 2012, Phoenix, AZ.
- 17. Raghu, T.S., Shao, B.B.M., Sinha, R., and Steinbart, P., "Propitious Selection in Identity Theft Protection Services," The 9<sup>th</sup> Workshop on E-Business (WeB), December 11, 2010, St. Louis, MO.
- 18. Furukawa, M., Raghu, T.S., and Shao, B.B.M., "Information Technology, Skilled Labor, and Factor Substitution: Evidence from the Healthcare Industry," The 21<sup>st</sup> Workshop on Information Systems and Economics (WISE), December 11-12, 2010, St. Louis, MO.

- 19. Furukawa, M., Raghu, T.S., and Shao, B.B.M., "Should Hospitals Mandate Use of Computerized Physician Order Entry Systems?" in Proceedings of the First Annual Workshop on Health IT and Economics (WHITE), October 8-9, 2010, Washington, D.C.
- 20. Cazier, J.A., Shao, B.B.M., and St. Louis, R.D., "Green Business and Online Price Premiums: Will Consumers Pay More to Purchase from Environmentally Friendly Technology Companies?" in Proceedings of the 16<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 12-15, 2010, Lima, Peru.
- 21. Kauffman, R.J., Shao, B.B.M., and Tsai, J., "Does Co-opetition Change the Game? A Bayesian Analysis of Firm Participation Strategy in an Industry Standard-Setting Organization," in Proceedings of the 43<sup>rd</sup> Hawaii International Conference on System Science (HICSS), January 5-8, 2010, Koloa, Kauai, Hawaii.
- 22. Chou, Y.C., Kauffman, R.J., and Shao, B.B.M., "Complementarities, Substitution and Spillover in the IT Industry: An Empirical Analysis of OECD Countries," The 20<sup>th</sup> Workshop on Information Systems and Economics (WISE), December 14-15, 2009, Phoenix, AZ.
- 23. Kauffman, R.J., Shao, B.B.M., and Tsai, J., "A Bayesian Analysis of Co-opetition: The Participation Strategies of Firms in a Process Standard-Setting Organization," The 20<sup>th</sup> Workshop on Information Systems and Economics (WISE), December 14-15, 2009, Phoenix, AZ.
- 24. Chou, Y.C., Kauffman, R.J., and Shao, B.B.M., "The Impact of Trade in IT Goods and Outsourcing on IT Industry Performance," The 2009 INFORMS Annual Meeting, October 11-14, 2009, San Diego, CA.
- 25. Kauffman, R.J., Shao, B.B.M., and Tsai, J., "A Co-opetition Perspective on Firm Entry Strategy in Standard-Setting Organizations," The 2009 INFORMS Annual Meeting, October 11-14, 2009, San Diego, CA.
- 26. Cazier, J.A., Shao, B.B.M., and St. Louis, R.D., "Addressing Privacy Concerns and Building Trust through Value Congruence," in Proceedings of the 2<sup>nd</sup> Secure Knowledge Management Workshop (SKM), September 28-29, 2006, Brooklyn, NY.
- 27. Arora, H., Shao, B.B.M., and Steinbart, P. "Looking at Information Security through a Prospect Theory Lens," in Proceedings of the 12<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 4-6, 2006, Acapulco, Mexico.
- 28. Keith, M., Shao, B.B.M., and Steinbart, P. "Usability of Passphrases for Authentication," in Proceedings of the 3<sup>rd</sup> CABIT Annual Security Symposium, September 8-9, 2005, Tempe, AZ.
- 29. Keith, M., Shao, B.B.M., and Steinbart, P. "The Effectiveness and Usability of Passphrases for Authentication," in Proceedings of the 11<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 11-14, 2005, Omaha, NE.
- 30. Shao, B.B.M., "Allocating Redundancy to Critical Information Technology Functions for Disaster Recovery," in Proceedings of the 10<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 5-8, 2004, New York, NY.
- 31. Shao, B.B.M., "Optimal Redundancy Allocation for Disaster Recovery Planning in the Network Economy," in Proceedings of the 2<sup>nd</sup> NSF/NIJ Symposium on Intelligence and Security Informatics, June 10-11, 2004, Tucson, AZ (published in Springer-Verlag's *Lecture Notes in Computer Science*, vol. 3073, 484-491).
- 32. Shao, B.B.M., "Planning Information Systems Disaster Recovery with Redundancy Allocation," in Proceedings of the 3<sup>rd</sup> Security Conference, April 14-15, 2004, Las Vegas, NV.
- 33. Chen, A.N.K., Sen, S., and Shao, B.B.M., "Identifying Factors to Improve Effective XML Adoption in Electronic Businesses," in Proceedings of the 9<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 4-6, 2003, Tampa, FL.
- 34. Cazier, J.A., Shao, B.B.M., and St. Louis, R.D., "Addressing E-Business Privacy Concerns: The Roles of Trust and Value Compatibility," in Proceedings of the 18<sup>th</sup> ACM Symposium on Applied Computing (ACM SAC), March 9-12, 2003, Melbourne, FL.

- 35. Shao, B.B.M. and Shu, W.S., "Productivity Breakdown of the Information Technology Industries across Countries," in Proceedings of the 36<sup>th</sup> Hawaii International Conference on System Science (HICSS), January 6-9, 2003, Waikoloa, Hawaii.
- 36. Shao, B.B.M. and Shu, W.S., "Productivity Growth, Technical Progress, and Efficiency Change in Information Technology Industries," in Proceedings of the 6<sup>th</sup> Pacific Asia Conference on Information Systems (PACIS), September 2-4, 2002, Tokyo, Japan.
- 37. Cazier, J.A., Shao, B.B.M., and St. Louis, R.D., "Personal Privacy Preferences in E-Business: A Focus on Trust and Value Compatibility," in Proceedings of the 8<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 9-11, 2002, Dallas, TX.
- 38. Lin, W.T. and Shao, B.B.M., "Information Technology and Technical Efficiency in the Constant Elasticity of Substitution Stochastic Production Frontier," in Proceedings of the 13<sup>th</sup> Information Resources Management Association International Conference, May 19-22, 2002, Seattle, WA.
- 39. Shao, B.B.M. and Fernandez, E., "Hedonic Price Analysis of the Server Appliance Market," in Proceedings of the 7<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 3-5, 2001, Boston, MA.
- 40. Lin, W.T. and Shao, B.M., "Efficiency Gains from the Relative Size of Information Technology Investments," in Proceedings of the 4<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 14-16, 1998, Baltimore, MD.
- 41. Shao, B.M. and Rao, H.R., "Using Divide-and-Conquer to Solve the Multiple Discrete Resource Allocation Problem," in Proceedings of the 4<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 14-16, 1998, Baltimore, MD.
- 42. Shao, B.M. and Lin, W.T., "A Simultaneous Contingency Model for User Involvement in Information Systems Development," in Proceedings of the 3<sup>rd</sup> INFORMS Conference on Information Systems and Technology (CIST), April 26-28, 1998, Montréal, Québec, Canada.
- 43. Rao, H.R. and Shao, B.M., "Information Acquisition for Discrete Resource Allocation: A Comparative Perspective," in Proceedings of the 3<sup>rd</sup> AIS Americas Conference on Information Systems (AMCIS), August 15-17, 1997, Indianapolis, IN.

#### **Articles under Review**

- 1. Cazier, J. Shao, B.B.M., and St. Louis, R.D., "Is Value-based Marketing Dead?"
- 2. Fiechter, J.L., Minnery, B., Choi, T., Handfield, R., Shao, B.B.M., Widmer, C., Juvina, I., and Steyvers, M., "A Crowd-sourced Approach to Identifying Hidden Critical Suppliers: Nexus Supplier Index Revisited
- 3. Li, Z. Shao, B.B.M., and St. Louis, R.D., "Overcoming Top Management Fear is the Key to Leveraging Data."

### **Work in Progress**

- 1. Shao, B.B.M., Lin, W.T., Tsai, J.Y., and Li, Z., "Productivity, Innovation and Catch-up of the Telecommunications Industries: A Stochastic Frontier Analysis."
- 2. Tsai, J.Y., Raghu, S., and Shao, B.B.M., "Partnership vs. Best-of-Breed: An Empirical Study of Information Technology Sourcing for E-Retailers."
- 3. Ware, T., Lu, T., T.S. Raghu, and Shao, B.B.M., "Augmenting Healthcare: Examining the Impact of Surgeon-Robot Congruence on Clinical Effectiveness and Surgeon Learning."

## **Book Chapters and Other Publications**

 Shao, B.B.M. and St. Louis, R., Chapter 9: "Organizing and Managing Data Analytics Teams for Procurement," in *Oxford Handbook of Supply Chain Management* (Eds. T. Choi, et al.), pp. 171-188, Oxford University Press, NY, 2021.

- 2. Shao, B.B.M. and St. Louis, R., "Invoice Disputes Resolution Using Machine Learning," *Honeywell Project Report*, 26 pages, Oct. 2, 2019.
- 3. Shao, B.B.M. and St. Louis, R., "How to Organize and Manage Data Analytics Teams for Procurement," *Inside Supply Management Magazine*, 3 pages, Jan/Feb 2019 Issue.
- 4. Shao, B.B.M. and St. Louis, R., "Data Analytics Teams and Procurement Who and What," *CAPS Research Project Report*, 54 pages, Dec. 21, 2018.
- 5. Shao, B.B.M., Shi, Z.M., and Choi, T., "Nexus Supplier Index: Digging Deeper into Supply Networks," *Inside Supply Management Magazine*, 3 pages, Mar/Apr 2016 Issue.
- 6. Shao, B.B.M., Shi, Z.M., and Choi, T., "Feasibility Study of Nexus Supplier Index: Identifying and Categorizing Nexus Suppliers through Business Analytics," *CAPS Research Project Report*, 42 pages, Jan. 7, 2016.
- Shao, B.B.M. and Lin, W.T., Chapter 5: "Evaluating Information Technology Industry Performance: A Stochastic Production Frontier Approach," in *Economics, Information Systems* and *E-Commerce: Empirical Research* (Eds. R.J. Kauffman and P.P. Tallon), pp. 113-134, Routledge, NY, 2009.

## Research Grants (Total amount: \$832,392)

- 1. Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2023, amount: \$20,000.
- 2. Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2022, amount: \$15,000.
- 3. Co-Principal Investigator: Leveraging Insights from Collective Human Expertise to Predict Important Nodes (LINCHPIN), funded by Intelligence Advanced Research Projects Activity (IARPA) and Kairos Research, 2021-2022 (with Dr. Thomas Choi), amount: \$111,442.
- 4. Principal Investigator: *Effects of Value Congruence and Trust on Online Information Disclosure*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2021, amount: \$15,000.
- 5. Principal Investigator: *Productivity, Catch-up and Innovation in Telecommunication: A Stochastic Production Frontier Approach*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2020, amount: \$12,500.
- 6. Co-Principal Investigator: *Invoice Disputes Resolution Using Machine Learning*, funded by Honeywell, 2019 (with Dr. Robert St. Louis), amount: \$54,000.
- 7. Principal Investigator: A Data Analytics Model for the Internet of Things (IoT) Network, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2019, amount: \$20,000.
- 8. Principal Investigator: *IT Sourcing of e-Retailers: Partnership vs. Best of Breed*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2018, amount: \$15,000.
- 9. Co-Principal Investigator: *Data Analytics Teams and Procurement Who and What*, funded by the CAPS Research, 2017 (with Dr. Robert St. Louis), amount: \$43,000.
- 10. Principal Investigator: *An Empirical Study of ICT-enabled Societal Transformations*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2017, amount: \$20,000.
- 11. Co-Principal Investigator: *Marine Highway*, funded by Ports America, 2017 (with Dr. Raghu Santanam), amount: \$10,000.
- 12. Principal Investigator: *Two-Zoned Networks for Platform-Mediated Markets: A Theoretical and Empirical Study*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2016, amount: \$25,000.

- 13. Co-Principal Investigator: Feasibility Study of Nexus Supplier Index Identifying and Categorizing Nexus Suppliers through Business Analytics, funded by the CAPS Research, 2015 (with Dr. Thomas Choi and Dr. Michael Shi), amount: \$40,000.
- 14. Principal Investigator: *Integrating Information Technology with the Value Chain: An Empirical Study of the Retail Industry*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2015, amount: \$20,000.
- 15. Principal Investigator: A Stochastic Approach to Measuring the Productivity of Information Technology Services Industries, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2014, amount: \$25,000.
- 16. Principal Investigator: *Productivity Performance of Information Technology Services Industries*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2013, amount: \$20,000.
- 17. Principal Investigator: *The Relationship between IT and Total Factor Productivity*, Department of Information Systems Summer Research Grant, Arizona State University, 2013, amount: \$7,000.
- 18. Principal Investigator: *A Study of E-Commerce Adoption and Performance*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2012, amount: \$20,000.
- 19. Principal Investigator: *DEA Window Analysis of IT Industries through Malmquist Index*, Department of Information Systems Summer Research Grant, Arizona State University, 2012, amount: \$7,000.
- 20. Principal Investigator: *Managing Knowledge Workforce in Software Development Life Cycle*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2011, amount: \$20,000.
- 21. Principal Investigator: A Hedonic Price Analysis of Brands, Consumer Inertia, and Vendor Licensing in the Personal Computer Market, Department of Information Systems Summer Research Grant, Arizona State University, 2011, amount: \$7,000.
- 22. Principal Investigator: *The Complementarity and Substitutability Effects of Information Technology*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2010, amount: \$16,750.
- 23. Principal Investigator: Strengthening Purchase Intentions and Enabling Price Premiums in Online Businesses through Value Congruence and Trust, Department of Information Systems Summer Research Grant, Arizona State University, 2008, amount: \$10,000.
- 24. Co-Principal Investigator: *Electronic Medical Records and Nurse Staffing: Best Practices and Performance Impacts*, funded by the Center for Health Management Research (CHMR) of the Health Research and Educational Trust (HRET), 2008 (with Dr. Mike Furukawa and Dr. Raghu Santanam), amount: \$20,000.
- 25. Principal Investigator: Evaluating Information Technology Industry Performance: A Stochastic Production Frontier Approach, Department of Information Systems Summer Research Grant, Arizona State University, 2007, amount: \$7,200.
- 26. CABIT Research Faculty: *Arizona Privacy and Security Solutions for Interoperable Health Information Exchange Project*, funded by the Research Triangle Institute (RTI) and National Governors Association (NGA), February 2006-April 2007, amount: \$110,000.
- 27. CABIT Research Faculty: *MEDSIS-CDR Gap Analysis Project*, funded by the Arizona Department of Health Services (ADHS), February 2005-July 2005, amount: \$95,000.
- 28. Principal Investigator: *Modeling Task Assignment for Large-Scale Software Projects*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2005, amount: \$15,000.

- 29. Principal Investigator: *Risk Analysis of Information Security in the Network Economy*, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2004, amount: \$18,000.
- 30. Principal Investigator: A Cross-Country Productivity Analysis of Information Technology Industries, Dean's Award for Excellence Summer Grant, W.P. Carey School of Business, Arizona State University, 2003, amount: \$12,000.
- 31. Principal Investigator: *Using Data Envelopment Analysis to Assess Organizational Impact of IT on Efficiency*, College of Business Research Support Grant Program, Arizona State University, 1999, amount: \$1,500.

## **TEACHING**

# **Courses Taught**

- CIS 220: Programming Concepts for Accounting Majors (Spring 2007)
- CIS 335: Visual Paradigms for Information Systems Development (Fall 1999, Spring 2000, Fall 2000, Spring 2001, Fall 2001)
- CIS 360: Business Database Concepts (Spring 2011)
- CIS 430: Networks and Distributed Systems (Spring 2002, Fall 2002, Spring 2003, Fall 2003, Spring 2005, Fall 2005, Fall 2006, Spring 2007)
- CIS 502: Information Systems and Digital Innovations (Spring 2017, Spring 2018, Spring 2019, Spring 2021, Spring 2022, Spring 2023)
- CIS 525 Onsite: Strategic Value of Information Technology (Summer 2015, Summer 2016, Fall 2017, Fall 2018, Fall 2019, Fall 2020, Fall 2021, Fall 2022, Fall 2023)
- CIS 525 Online: Strategic Value of Information Technology (Fall 2015, Spring 2016, Fall 2016, Spring 2017, Spring 2018)
- CIS 535: Distributed and Multi-Media Information Systems (Fall 2004, Fall 2005, Fall 2006, Fall 2009)
- CIS 565: Artificial Intelligence and Business (Spring 2019)
- CIS 591 China EMBA: Information Technology Management (Fall 2023)
- CIS 591 Onsite: Strategic Value of Information Technology (Summer 2007, Summer 2008, Summer 2009, Summer 2010, Summer 2011, Summer 2012, Summer 2013, Summer 2014)
- CIS 591 Online: Strategic Value of Information Technology (Spring 2012, Fall 2012, Spring 2014)
- CIS 591: Networks and Platform-Enabled Markets (Spring 2009)
- CIS 593: Applied Project (Summer 2018)
- CIS 791: Doctoral Seminar on Research Methods/Foundational Readings (Fall 2011, Fall 2015, Fall 2017, Fall 2019, Fall 2021)
- CIS 790 & 792: Independent Study of Doctoral Students (Fall 2000, Fall 2001, Spring 2002, Fall 2002, Fall 2003, Fall 2004, Fall 2005, Fall 2006, Fall 2008, Fall 2009, Fall 2011, Spring 2012, Fall 2012, Fall 2013)

### Dissertations Supervised - PhD

- 1. Ware. T., *Robotic-assisted Surgeries: Are Experts Learning from Interacting with Machines?* August 2022 Present (Committee Co-Chair).
- 2. Li, Z., *Investigating Digital Platforms from an Ecosystem Perspective*, August 2021 (Committee Member, Initial Placement: ASU Thunderbird School of Global Management).
- 3. Glassman, J., *An Examination of The Path to Prescriptive Analytics*, December 2020 (Committee Member, Initial Placement: SunWest Fruit Company).

- 4. Chou, C. C., Evaluating the Performance of U.S. Manufacturing and Service Organizations in the Presence of IT and EC, May 2017 (External Committee Member at SUNY-Buffalo; Initial Placement: Central Michigan University).
- 5. Kao, T.W., *An Empirical Study of Supply Network: Combining Social Network Analysis with Econometric Approaches*, May 2016 (External Committee Member at SUNY-Buffalo; Initial Placement: University of Michigan at Dearborn).
- 6. Chou, Y.C., Adoption and Business Value of Mobile Retail Channel: A Dependency Perspective on Mobile Commerce, May 2013 (Committee Chair; Initial Appointment: National Chengchi University).
- 7. McCreless, T., *Affecting Behavioral Change through the Use of Computer-Mediated Technology*, December 2012 (Committee Member; Initial Appointment: Fayetteville State University).
- 8. Tsai, J., *Information Systems and Technology Sourcing Strategies and Performance of E-Retailers*, May 2012 (Committee Chair; Initial Appointment: eBay).
- 9. Arora, H., *Optimizing Service Quality in Dynamic Decision-Making Environments: A Resource Allocation Perspective*, May 2009 (Committee Member; Initial Appointment: Microsoft).
- 10. Burton, O., Assessing the Impact of Information Structure and Availability in Surveillance Processes, May 2006 (Committee Member; Initial Appointment: Abilene Christian University).
- 11. Cazier, J.A., *The Relationships Among Value Congruence, Trust, and Behavioral Intentions in E-Businesses*, May 2004 (Committee Co-Chair; Initial Appointment: Appalachian State University).
- 12. Webb, J.A., *The Performance Enabling Effects Between Information Technology and Supply Chain Management: Evidence from Durable Manufacturing Industries*, July 2001 (Committee Member; Initial Appointment: Naval Postgraduate School).

## **Dissertations Supervised - DBA**

- 13. Liu, C., A Study on Digital Micro-loan Model of County Rural Commercial Banks, October 2021 Present (Committee Co-chair, ASU China DBA Program).
- 14. Li, H., On Golf Course Management with Multi-level Membership System, October 2021 Present (Committee Co-chair, ASU China DBA Program).
- 15. Lin, J., *Reflection of ESG on Corporate Performance and Valuation*, October 2021 Present (Committee Co-chair, ASU China DBA Program).
- 16. Shen, Y., *On the Institutional Development of MFOs in Mainland China*, October 2021 Present (Committee Co-chair, ASU China DBA Program).
- 17. Wang, X., A Study on the Influence of Marketing Models in Third- and Fourth-Tiered Cities: Evidence from Experiments in Qingyuan, October 2021 Present (Committee Member, ASU China DBA Program).
- 18. Cai, H., *The Impact of Digitalization Capability on Supply Chain Performance of Fortune 500 Companies*, October 2021 Present (Committee Member, ASU China DBA Program).
- 19. Huang, X., *On the Construction of Industry Rotation Strategy with ETF as the Underlying Asset*, October 2021 Present (Committee Co-chair, ASU China DBA Program).
- 20. Zhou, H.F., *The Impact of Invoice Data on SME Financing in the Healthcare Industry*, October 2019 Present (Committee Co-chair, ASU China DBA Program).
- 21. Zhao, Y.H., When Is the Hydrogen Car Ready to Go? A Green and Low-carbon Perspective on New Energy Commercial Vehicle Market Development, October 2019 Present (Committee Co-chair, ASU China DBA Program).
- 22. Xu, X., How Can Community Service Providers Build a Sustainable Community Collaboration Mechanism in the Post Pandemic Era? December 2022 (Committee Co-chair, ASU China DBA Program).
- 23. Wu, H., *Influencing Factors of City Innovation and Its Relationship with the Capacity of Real Estate Market*, May 2022 (Committee Co-chair, ASU China DBA Program).

- 24. Fang, X., Models and Performance of Bankruptcy and Reorganization for Distressed Publicly Listed Companies, May 2022 (Committee Co-chair, ASU China DBA Program).
- 25. Wang, H., Analysis of the Impact of Patents on Equity Financing of Innovative and Entrepreneurial Enterprises in China, May 2022 (Committee Co-chair, ASU China DBA Program).
- 26. Wang, Y., *Influencing Factors and Strategies of the Development of China-Mongolia Ports*, May 2022 (Committee Co-chair, ASU China DBA Program).
- 27. Ji, P., *Media Attention, Institutional Environment and Corporate Social Responsibility*, May 2022 (Committee Co-chair, ASU China DBA Program).
- 28. Huang, Q., Influence of Development Strategy on Group Value Creation: Case of MicroPort Scientific Corporation's Super-Conglomerate of Emerging Medical Technologies Strategy, May 2022 (Committee Co-chair, ASU China DBA Program).
- 29. Cao, H.C., A Study of Influential Factors for Customer Satisfaction on Online IT Service Platforms, May 2021 (Committee Co-chair, ASU China DBA Program).
- 30. Li, C.Y., An Empirical Study of Financing Behaviors and Credit Loan Risks for Small and Micro Businesses in China, May 2021 (Committee Co-chair, ASU China DBA Program).
- 31. Zhang, J.J., *An Empirical Study of the Impact of Agricultural Supply Chain Finance on Agricultural Wholesale Market*, May 2021 (Committee Co-chair, ASU China DBA Program).
- 32. Shi, J.H., *The Impact of Internet Foreclosure on the Price of Non-Performing Assets*, May 2021 (Committee Co-chair, ASU China DBA Program).
- 33. Zhu, H., A Study of China's Real Estate Private Equity Funds from the Perspective of Asset Allocation, May 2021 (Committee Co-chair, ASU China DBA Program).
- 34. He, S., *Research on the Influential Factors of Block Chain DApp Governance*, May 2020 (Committee Co-chair, ASU China DBA Program).
- 35. Miao, R., *Impact of Mixed Operation on Bank Performance and Its Mechanism*, May 2020 (Committee Member, ASU China DBA Program).
- 36. Zhao, L., Is the Public-Private Partnership (PPP) Model a Panacea for Promoting the Healthy Development of the Government E-services Platform? Panel Data Analysis of Government App from 50 Cities in East China, May 2019 (Committee Member; ASU China DBA Program).
- 37. Xu, J., *A Differential Study of Advertising Expenditures for Traditional and New Media in China*, May 2018 (Committee Member; ASU China DBA Program).

### Independent Studies (CIS 790 & 792) of Doctoral Students Supervised

- Fall 2013: Chunxiao Li
- Fall 2012: Jeremy Glassman
- Fall 2011: Yen-Chun Chou
- Fall 2009: Juliana Tsai
- Fall 2008: Yen-Chun Chou
- Fall 2006: Yong-Jick Lee
- Fall 2005: Hina Arora
- Fall 2004: Mark Keith
- Fall 2003: Jiakai Chen
- Fall 2002: Sagnika Sen
- Spring 2002: Joseph Cazier
- Fall 2001: Mark Gill
- Fall 2000: Edgar Fernandez

## **MSISM Applied Projects Mentored**

- Summer 2018: Eleven Teams with 43 students
- Fall 2012-Spring 2013: Cat Silverman, Stephen Male, Abdoul Wane, Atta Ali

- Fall 2012-Spring 2013: Jeff Moegling, Eric Peters, Naveen Kamrudeen, Ram Sankarasubramanian
- Fall 2011-Spring 2012: Daniel Jewell, Arthur Kenjora, Timothy Schultz, Cory Steinbicker
- Fall 2011-Spring 2012: Chad Barczuk, Thomas Douglas, Nic NoGalbo, Randall Lohn
- Fall 2010-Spring 2011: Gina Apresa, Tyler Loomis, Scott Parker, and Tracy To
- Fall 2010-Spring 2011: Sean Donohue, Joseph Giannotti, Seth Snitzer, and Kyle Yarbrough
- Fall 2009-Spring 2010: Joe Atkielski, Matt Harkema, Mayur Thapliyal, and Ricky Wan
- Fall 2009-Spring 2010: James Baum, Parthavi Patel, Carlos Santiago-Merced, and Tim Weid
- Fall 2008-Spring 2009: Francisco Castillo, Michael Focareto, Jason Green, and Charles Holaday
- Fall 2008-Spring 2009: Mohit Parnami, LyNea Porche, Julius Riodique, Matthew Standart, and Megan Zhao
- Fall 2006-Spring 2007: Christy Meek, Chris Floyd, and Robert Barr
- Fall 2006-Spring 2007: Heta Hunkin, Lisa Perez, and Jessica Tomas

## **Honors Theses Supervised**

- Weise, J., Honors Project: Web Application Development for Sprouts Farmers Market, September 2011 through May 2012 (Director)
- Relucio, C., Honors Thesis: Telecommuting at Apple, September 2011 through May 2012 (2<sup>nd</sup> Reader)
- Oprisiu, T., Honors Thesis: A Cross-Generational Study of Online Information Sharing, September 2010 through May 2011 (Director)
- Baylock, B. and Webb, J., Honors Thesis: Date U on Cloud Computing, September 2010 through May 2011 (2<sup>nd</sup> Reader)
- Boeing, G., Honors Thesis: Database Dawn—Information Technology Administration for the Present and the Future, January 2004 through May 2004 (2<sup>nd</sup> Reader)
- Brill, M., Honors Thesis: Web Services and Their Role in Streamlining and Integrating Business Processes, April 2002 through May 2003 (2<sup>nd</sup> Reader)
- Farooqi, S., Honors Thesis: Intelligent Information Agents and Their Application in E-Commerce, January 2001 through May 2001 (2<sup>nd</sup> Reader)

## **Honors Credits & Footnote 18**

- Fall 2005: Alejandro Macias
- Spring 2003: Andrew Blout and Matt Brill
- Fall 2000: Angel Ho and Andrea Tsoi

### **SERVICE ACTIVITIES**

## **Internal Services (\* elected)**

- IS Department Personnel Advisory Team\*: 2003-2004, 2006-2007, 2009-2013, 2017-2018, 2019-2022 (chair: 2019-2020)
- IS Department Chair Advisory Team\*: 2005-2007, 2009-2014, 2018-Present
- IS Department Faculty Recruiting Team\*: 2011-2016, 2019-2023 (chair: 2011-2012, 2019-2022)
- IS Department Doctoral Program Team: 2008-2009, 2011-2014, 2015-2018 (chair: 2008-2009, 2011-2014, 2015-2017)
- IS Department Masters Programs Team: 2017-2021 (chair: 2017-2018)
- IS Department Undergraduate Curriculum Team: 1999-2000, 2001-2007, 2009-2011, 2014-2015 (chair: 2006-2007, 2010-2011)
- IS Department Undergraduate Honors and Scholarships Team: 2001-2003, 2005-2007, 2009-2010 (chair: 2005-2007, 2009-2010)
- IS Department Undergraduate Core Course Team: 2010-2011
- IS Department Undergraduate Admission Team: 2009-2010

- IS Department Research Workshop Team: 2003-2006, 2011-2012 (co-chair: 2011-2012)
- IS Department Professional Advisory Board Team: 2010-2011
- IS Department Research Labs Team: 2017-Present
- IS Department ByLaws Team: 2009-2010 (co-chair: 2009-2010)
- IS Department Physical Facility Team: 2006-2007
- IS Department Student Clubs Team: 2000-2002
- IS Department Assessment Team: 1999-2000, 2011-2017
- W. P. Carey School Dean's Personnel Advisory Committee\*: 2022-Present
- W. P. Carey School Faculty Council: 2018-2022
- W. P. Carey School Doctoral Program Committee: 2008-2009, 2011-2017
- W. P. Carey School Masters Programs Committee: 2017-2021
- W. P. Carey School Day MBA Concentration and Lead Committee: 2017-2021
- W. P. Carey School Honors and Awards Committee: 2005-2008, 2009-2011
- W. P. Carey School Undergraduate Committee: 2006-2007, 2010-2011
- W. P. Carey School Undergraduate Honors Committee: 2009-2010
- W. P. Carey School Advisor of the Asian Business Leaders Association (ABLA): 2001-2003

ASU University Graduate Council: 2016-2019

ASU Advisor of the Tzu Ching Student Organization: 2014-2019

## **Professional Services and Experiences**

#### Senior Editor --

- Decision Support Systems, 2014-Present
- Electronic Commerce Research and Applications, 2013-Present

### Associate Editor --

- *Information & Management*, 2014-Present
- Pacific Asia Journal of the Association for Information Systems, 2009-2020
- International Journal of Applied Metaheuristic Computing, 2009-2020
- International Journal of Business Intelligence Research, 2009-2020
- *Journal of the Association for Information Systems*, 2008-2012
- *Information Technology & Management*, 2008-2012
- *Information Systems Research* Special Issue on "Humans, Algorithms, and Augmented Intelligence: The Future of Work, Organizations and Society," 2018-2020
- Journal of the Association for Information Systems Special Issue on "Addressing Societal Challenges through Analytics," 2018-2019
- European Journal of Information Systems Special Issue on "Information Security and Privacy in Organizations," 2016-2017
- MIS Quarterly Special Issue on "Information Systems Security in a Digital Economy," 2012-2013

#### Research Faculty --

- Co-Director of the Digital Society Initiative (DSI) Lab, 2017-Present
- Center for Supply Networks (CaSN), W. P. Carey School of Business, Arizona State University, 2014-Present
- Information Assurance (IA) Center, School of Computing and Informatics, Ira A. Fulton School of Engineering, Arizona State University, 2006-2018
- Security & Defense Systems Initiative (SDSI), Arizona State University, 2012-2018
- Center for Advancing Business through Information Technology (CABIT), W. P. Carey School of Business, Arizona State University, 2002-2013

- Visiting Scholar of Management Information Systems, Eller College of Management, University of Arizona
- Co-Track Chair of Business Analytics for Organizational Performance Management, The 26th AIS Americas Conference on Information Systems (AMCIS), August 10-14, 2020, Salt Lake City, UT
- Co-Track Chair of Business Analytics for Organizational Performance Management, The 25<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 15-17, 2019, Cancun, Mexico
- Co-Track Chair of Business Analytics for Organizational Performance Management, The 24<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 16-18, 2018, New Orleans, LA
- Co-Track Chair of Business Analytics for Organizational Performance Management, The 23<sup>rd</sup> AIS Americas Conference on Information Systems (AMCIS), August 10-12, 2017, Boston, MA
- Co-Track Chair of Business Analytics for Organizational Performance Management, The 22<sup>nd</sup> AIS Americas Conference on Information Systems (AMCIS), August 11-13, 2016, San Diego, CA
- Co-Track Chair of Business Analytics for Organizational Performance Management, The 21<sup>st</sup> AIS Americas Conference on Information Systems (AMCIS), August 13-15, 2015, Puerto Rico
- Co-Track Chair of Business Intelligence for Organizational Performance Measurement and Improvement, The 20<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 7-10, 2014, Savannah, GA
- Co-Track Chair of Business Intelligence for Organizational Performance Measurement and Improvement, The 19<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 15-17, 2013, Chicago, IL
- Co-Track Chair of Business Intelligence for Organizational Performance Measurement and Improvement, The 18<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 9-11, 2012, Seattle, WA
- Co-Track Chair of Business Intelligence for Organizational Performance Measurement and Improvement, The 17<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 4-7, 2011, Detroit, MI
- Co-Track Chair of Business Intelligence, The 16<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 12-15, 2010, Lima, Peru
- Co-Track Chair of Research Methods, The 30<sup>th</sup> International Conference on Information Systems (ICIS), December 15-18, 2009, Phoenix, AZ
- Co-Track Chair of Business Intelligence, The 15<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 6-9, 2009, San Francisco, CA
- Co-Track Chair of Business Intelligence, The 14<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 14-17, 2008, Toronto, Canada
- Co-Track Chair of Business Intelligence, The 13<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 9-12, 2007, Keystone, CO
- Co-Track Chair of Business Intelligence: Opportunities and Challenges, The 12<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 4-6, 2006, Acapulco, Mexico
- Co-Track Chair of Business Intelligence and Its Challenges, The 11<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 11-15, 2005, Omaha, NE
- Session Chair of Business Analytics for Organizational Performance Management, The 25<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 15-17, 2019, Cancun, Mexico
- Session Chair of Online Communities, The 28<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 16-18, 2018, Santa Clara, CA
- Session Chair of Business Analytics for Organizational Performance Management, The 24<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 16-18, 2018, New Orleans, LA
- Session Chair of Business Analytics for Organizational Performance Management, The 23<sup>rd</sup> AIS Americas Conference on Information Systems (AMCIS), August 10-12, 2017, Boston, MA

- Session Chair of Business Analytics for Organizational Performance Management, The 22<sup>nd</sup> AIS Americas Conference on Information Systems (AMCIS), August 11-14, 2016, San Diego, CA
- Session Chair of Business Analytics for Organizational Performance Management, The 21<sup>st</sup> AIS Americas Conference on Information Systems (AMCIS), August 13-15, 2015, Puerto Rico
- Session Chair of Business Intelligence for Organizational Performance Measurement and Improvement, The 18<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 9-11, 2012, Seattle, WA
- Session Chair of Business Intelligence, The 15<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 6-9, 2009, San Francisco, CA
- Session Chair of Business Intelligence, The 14<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 14-17, 2008, Toronto, Canada
- Session Chair of Balancing Collaboration and Control, The 5<sup>th</sup> Annual ASU CABIT Symposium, April 24-25, 2008, Tempe, AZ
- Session Chair of E-Business and E-Commerce in China, The 9<sup>th</sup> International Conference on Electronic Commerce (ICEC), August 19-22, 2007, Minneapolis, MN
- Session Chair of Business Intelligence, The 13<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 9-12, 2007, Keystone, CO
- Session Chair of Privacy in Data Mining Track, The 2<sup>nd</sup> Secure Knowledge Management Workshop, September 28-29, 2006, Brooklyn, NY
- Session Chair of Modeling Information Supply Chains, The 4<sup>th</sup> Annual ASU CABIT Symposium, September 7-8, 2006, Phoenix, AZ
- Session Chair of Business Intelligence and Its Challenges Track, The 11<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 11-15, 2005, Omaha, NE
- Session Chair of Knowledge Management Track, The 10<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 5-8, 2004, New York, NY
- Session Chair of Artificial Intelligence Applications Track, The 4<sup>th</sup> AIS Americas Conference on Information Systems (AMCIS), August 14, 1998, Baltimore, MD
- Program Committee Member, The 32<sup>nd</sup> Workshop on Information Technologies and Systems (WITS), December 14-16, 2022, Copenhagen, Denmark
- Program Committee Member, The 31<sup>st</sup> Workshop on Information Technologies and Systems (WITS), December 15-17, 2021, Austin, TX
- Program Committee Member, The 20<sup>th</sup> Workshop on E-Business (WeB), December 11, 2021, Austin, TX
- Program Committee Member of IoT, Mobile, and Ubiquitous Computing Track, The International Conference on Information Systems (ICIS), December 15-18, 2019, Munich, Germany
- Program Committee Member, The 7<sup>th</sup> Taiwan Summer Workshop on Information Management: Artificial Intelligence and Big Data, July 3-5, 2019, Taoyuan, Taiwan
- Program Committee Member, The 2019 IEEE International Conference on Services Computing (SCC), June 25-June 30, 2019, San Diego, CA
- Program Committee Member, The 28<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 16-18, 2018, Santa Clara, CA
- Program Committee Member, The 10<sup>th</sup> INFORMS Conference on Information Systems and Technology (CIST), November 3-4, 2018, Phoenix, AZ
- Program Committee Member, The 2018 IEEE International Conference on Services Computing (SCC), July 2-July 7, 2018, San Francisco, CA
- Program Committee Member, The 27<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 14-15, 2017, Seoul, Korea
- Program Committee Member, The 16<sup>th</sup> Workshop on E-Business (WeB), December 10, 2017, Seoul, Korea
- Program Committee Member, The 2017 IEEE International Conference on Services Computing (SCC), June 25-June 30, 2017, Honolulu, HI

- Program Committee Member of IS Security and Privacy Track, The International Conference on Information Systems (ICIS), December 11-14, 2016, Dublin, Ireland
- Program Committee Member, The 26<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 11, 2016, Dublin, Ireland
- Program Committee Member, The 15<sup>th</sup> Workshop on E-Business (WeB), December 11, 2016, Dublin, Ireland
- Program Committee Member, The 2016 IEEE International Conference on Services Computing (SCC), June 27-July 2, 2016, San Francisco, CA
- Program Committee Member, The Fourth Taiwan Summer Workshop on Information Management: The Opportunities and Challenges for IS Research in The Big Data Era, June 26-28, 2016, Chiayi, Taiwan
- Program Committee Member, The 11th Annual Symposium on Information Assurance (ASIA), June 8-9, 2016, Albany, NY
- Program Committee Member of IS Security and Privacy Track, The International Conference on Information Systems (ICIS), December 13-16, 2015, Dallas, TX
- Program Committee Member, The 25<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 12-13, 2015, Dallas, TX
- Program Committee Member, The 14<sup>th</sup> Workshop on E-Business (WeB), December 12, 2015, Dallas, TX
- Program Committee Member, The Third Taiwan Summer Workshop on Information Management: Big Data, Analytics and Opportunity, July 12-14, 2015, Taipei, Taiwan
- Program Committee Member, The 2015 IEEE International Conference on Services Computing (SCC), June 27-July 2, 2015, New York, NY
- Program Committee Member, The 10th Annual Symposium on Information Assurance (ASIA), June 2-3, 2015, Albany, NY
- Program Committee Member of IS Security and Privacy Track, The International Conference on Information Systems (ICIS), December 14-17, 2014, Auckland, New Zealand
- Program Committee Member, The 24<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 17-19, 2014, Auckland, New Zealand
- Program Committee Member, The 13<sup>th</sup> Workshop on E-Business (WeB), December 13, 2014, Auckland, New Zealand
- Program Committee Member, the Fifth International Conference on Communication in Management, Education and Play (Cycle: Social Communication in Real and Virtual World), November 25-27, 2014, Wroclaw, Poland
- Program Committee Member, The Second Taiwan Summer Workshop on Information Management: Social Media and Business Innovation, July 1-3, 2014, Kaohsiung, Taiwan
- Program Committee Member, The 2014 IEEE International Conference on Services Computing (SCC), June 27-July 2, 2014, Anchorage, AK
- Program Committee Member, The 9th Annual Symposium on Information Assurance (ASIA), June 3-4, 2014, Albany, NY
- Program Committee Member of IS Security and Privacy Track, The International Conference on Information Systems (ICIS), December 15-18, 2013, Milan, Italy
- Program Committee Member, The 23<sup>rd</sup> Workshop on Information Technologies and Systems (WITS), December 15-16, 2013, Milan, Italy
- Program Committee Member, The Second International Conference on ICT Management for Global Competitiveness and Economic Growth in Emerging Economies (ICTM 2013), September 16-17, 2013, Wroclaw, Poland
- Program Committee Member, The First Taiwan Summer Workshop on Information Management: Business Intelligence for Service Innovation, July 15-17, 2013, Taipei, Taiwan
- Program Committee Member, The 2013 IEEE International Conference on Services Computing (SCC), June 27-July 2, 2013, Santa Clara, CA
- Program Committee Member, The 8th Annual Symposium on Information Assurance (ASIA), June 4-5, 2013, Albany, NY

- Program Committee Member of IS Security and Privacy Track, The International Conference on Information Systems (ICIS), December 16-19, 2012, Orlando, FL
- Program Committee Member, The 22<sup>nd</sup> Workshop on Information Technologies and Systems (WITS), December 15-16, 2012, Orlando, FL
- Program Committee Member, The 11th Workshop on E-Business (WeB), December 15, 2012, Orlando, FL
- Program Committee Member, The 17th INFORMS Conference on Information Systems and Technology (CIST), October 14-17, 2012, Phoenix, AZ
- Program Committee Member, The First International Conference on ICT Management for Global Competitiveness and Economic Growth in Emerging Economies (ICTM 2012), September 17-18, 2012, Wroclaw, Poland
- Program Committee Member, The 2012 IEEE International Conference on Services Computing (SCC), July 2-7, 2012, Honolulu, HI
- Program Committee Member, The 14th International Conference on Enterprise Information Systems (ICEIS) Workshop on Information Value Management (IVM), June 28, 2012, Wroclaw, Poland
- Program Committee Member of IS Security and Privacy Track, The European Conference on Information Systems (ECIS), June 10-13, 2012, Barcelona, Spain
- Program Committee Member, Joint Workshop on Secure Knowledge Management (SKM) and the 7th Annual Symposium on Information Assurance (ASIA), June 5-6, 2012, Albany, NY
- Program Committee Member, The 21<sup>st</sup> Workshop on Information Technologies and Systems (WITS), December 3-4, 2011, Shanghai, China
- Program Committee Member, The 10th Workshop on E-Business (WeB), December 4, 2011, Shanghai, China
- Program Committee Member, The 16th INFORMS Conference on Information Systems and Technology (CIST), November 12-13, 2011, Charlotte, NC
- Program Committee Member of IS Security Track, The European Conference on Information Systems (ECIS), June 9-11, 2011, Helsinki, Finland
- Program Committee Member, The 2011 IEEE International Conference on Services Computing (SCC), July 5-10, 2011, Washington, DC
- Program Committee Member, The International Workshop on Information Value Management (IVM), June 8, 2011, Beijing, China
- Program Committee Member of IS Security and Privacy Track, The 31<sup>st</sup> International Conference on Information Systems (ICIS), December 12-15, 2010, St. Louis, MO
- Program Committee Member, The 20<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 10-11, 2010, St. Louis, MO
- Program Committee Member, The 4<sup>th</sup> Workshop on Secure Knowledge Management (SKM), October 21-22, 2010, New Brunswick, NJ
- Program Committee Member, The 19<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 14-15, 2009, Phoenix, AZ
- Program Committee Member, The 2009 IEEE International Conference on Services Computing (SCC), September 21-25, 2009, Bangalore, India
- Program Committee Member, The 18<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 13-14, 2008, Paris, France
- Program Committee Member, The 3<sup>rd</sup> Workshop on Secure Knowledge Management (SKM), November 3-4, 2008, Dallas, TX
- Program Committee Member, The 2008 IEEE Symposium on Advanced Management of Information for Globalized Enterprises, September 28-29, 2008, Tianjin, China
- Program Committee Member, The 2008 IEEE International Conference on Services Computing (SCC), July 8-11, 2008, Honolulu, HI
- Program Committee Member, The 2<sup>nd</sup> China Summer Workshop on Information Management, June 29-30, 2008, Chengdu, China

- Program Committee Member, The 6<sup>th</sup> Workshop on e-Business (WeB), December 9, 2007, Montréal, Québec, Canada
- Program Committee Member, The 17<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 8-9, 2007, Montréal, Québec, Canada
- Program Committee Member, The 2007 IEEE International Conference on Services Computing (SCC), July 7-13, 2007, Salt Lake City, UT
- Program Committee Member, The 9<sup>th</sup> International Conference on Decision Support Systems, January 2-4, 2007, Kolkata, India
- Program Committee Member, The 5<sup>th</sup> Workshop on e-Business (WeB), December 10, 2006, Milwaukee, WI
- Program Committee Member, The 16<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 10-11, 2006, Milwaukee, WI
- Program Committee Member, The 2006 Workshop on Conceptual Modeling of Service-Oriented Software Systems, November 6-9, 2006, Tucson, AZ
- Program Committee Member, The 11<sup>th</sup> INFORMS Conference on Information Systems and Technology (CIST), November 4-5, 2006, Pittsburgh, PA
- Program Committee Member, The 2<sup>nd</sup> Workshop on Secure Knowledge Management (SKM), September 28-29, 2006, New York, NY
- Program Committee Member, The 2006 IEEE International Conference on Services Computing, September 18-22, 2006, Chicago, IL
- Program Committee Member, The 4<sup>th</sup> Annual ASU CABIT Symposium, September 7-8, 2006, Phoenix, AZ
- Program Committee Member, The 4<sup>th</sup> Workshop on e-Business (WeB), December 10, 2005, Las Vegas, NV
- Program Committee Member, The 15<sup>th</sup> Workshop on Information Technologies and Systems (WITS), December 10-11, 2005, Las Vegas, NV
- Program Committee Member, The 10<sup>th</sup> INFORMS Conference on Information Systems and Technology (CIST), November 12-13, 2005, San Francisco, CA
- Program Committee Member, The 3<sup>rd</sup> Annual ASU CABIT Security Symposium 2005, September 8-9, 2005, Tempe, AZ
- Program Committee Member, The 9<sup>th</sup> Pacific Asia Conference on Information Systems (PACIS), July 7-10, 2005, Bangkok, Thailand
- Program Committee Member, The 9<sup>th</sup> INFORMS Conference on Information Systems and Technology (CIST), October 23-24, 2004, Denver, CO
- Program Committee Member, Special Track on E-Commerce Technologies, The 18<sup>th</sup> ACM Symposium on Applied Computing, March 9-12, 2003, Melbourne, FL
- Invited Speaker on Data Analytics Teams for Procurement, CAPS Research/HSRC-ASU 2019 Dissemination Conference Meeting, March 14, 2019, Tempe, AZ
- Invited Speaker on Data Analytics Teams for Procurement, PEG Conference Meeting, March 7, 2019, Scottsdale, AZ
- Invited Speaker on Supply Networks and Hidden Critical Suppliers, MAPI Purchasing Council Meeting, February 27, 2019, Phoenix, AZ
- Invited Speaker on How to Conduct Academic Research, Symbiosis International Conference, September 28, 2016, New Delhi, India
- Invited Speaker, Recruiting Cyber Professionals in the University System, TechNet Land Forces Southwest, March 27-29, 2012, Tucson, AZ
- Moderator, Alliances and Technical Formations, Information Systems Industry Partners Conference on Winning the AI & Analytics Talent War, February 21, 2019, Tempe, AZ
- Moderator, Modeling Information Supply Chains, Symposium on Cultivating and Securing the Information Supply Chain, September 7-8, 2006, Phoenix, AZ
- Panelist, DocNet Consortium of Business Doctoral Programs, November 17, 2016, Phoenix, AZ

- Panelist, Recruiting, Training and Retaining Tomorrow's Cyber Warriors, TechNet Land Forces Southwest, March 27-29, 2012, Tucson, AZ
- External Program Reviewer, CAPA Sydney Five Year Review Site Review Team (SRT), April 7-11, 2014, Sydney, Australia
- Co-Guest Editor of Special Issue on Web Services and Electronic Commerce, *Journal of Electronic Commerce Research*, January 2003-November 2003

#### Ad hoc Reviewer --

MIS Quarterly, Information Systems Research, Management Science, Journal of the Association for Information Systems, Journal of Management Information Systems, Decision Sciences, Decision Support Systems, Communications of the ACM, ACM Transactions on Management Information Systems, ACM Transactions on Internet Technologies, ACM Journal of Data and Information Quality, IEEE Transactions on Engineering Management, IEEE Transactions on Systems, Man, and Cybernetics, IEEE Transactions on Dependable and Secure Computing, IEEE Transactions on Intelligent Transportation Systems, International Journal of Human-Computer Studies, International Journal of Production Economics, International Journal of Production Research, Information Systems Frontiers, Information & Management, Information Technology & Management, Information and Software Technology, European Journal of Information Systems, Electronic Commerce Research and Applications, Journal of Electronic Commerce Research, Journal of Database Management, Information Systems Journal, Computer Standards & Interfaces, International Journal of Service Sciences, Annals of Information Systems, Internet Encyclopedia, Imaging Science Journal, European Journal of Operational Research, Journal of the Operational Research Society, Annals of Operations Research, Information Processing Letters, AMCIS Conference, HICSS Conference, ICIS Conference, ACM Symposium on Applied Computing, INFORMS Conference on Information Systems and Technology (CIST), NSF/NIJ Symposium on Intelligence and Security Informatics, Workshop on Information Systems Economics (WISE), Workshop on Information Technologies and Systems (WIST), and Workshop on e-Business (WeB)

## **HONORS AND AWARDS**

- Distinguished Alumni Award, College of Management, National Yang Ming Chiao Tung University, Hsinchu, Taiwan, 2023
- Outstanding Service Award of Department of Information Systems, W. P. Carey School of Business, Arizona State University, 2021 and 2022
- Outstanding Graduate Teaching Award of W. P. Carey School of Business, Arizona State University, 2018
- Outstanding Teaching Award of Department of Information Systems Masters Programs, W. P. Carey School of Business, Arizona State University, 2016
- Finalist for the Outstanding Graduate Teaching Award of the W. P. Carey School of Business, Arizona State University, 2014
- DISC Professor of the Year Award for Excellent Teaching, W. P. Carey School of Business, Arizona State University, 2003 and 2005
- John W. Teets Outstanding Teaching Award of the Business College Council, Arizona State University, 2003
- Undergraduate Teaching Recognition by the Department of Information Systems Club, College of Business, Arizona State University, 2001
- Finalist for the John W. Teets Outstanding Teaching Award of the Business College Council, Arizona State University, 2001
- Dean's Awards for Excellence Summer Research Grants, W. P. Carey School of Business, Arizona State University, 2003, 2004, 2005, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023

Department of Information Systems Summer Research Grant Awards, W. P. Carey School of Business, Arizona State University, 2007, 2008, 2011, 2012, 2013, 2014

Who's Who in Business Higher Education, 2003

Who's Who in America, 2002

Who's Who Among Students in American Universities and Colleges, 1996

Elected Member of the Society of Beta Gamma Sigma, 2000

Finalist for the Student Achievement Award, School of Management, SUNY at Buffalo, 1998, 1999

Robert F. Berner Award for Excellence in Doctoral Student Research, School of Management, SUNY at Buffalo, 1995

IIM Best Paper Award, National Chiao Tung University, Hsinchu, Taiwan, 1992

# **REFERENCES**

Available upon request