### **AVIIIT SARKAR**

University of Redlands, School of Business 1200 E. Colton Avenue, Redlands, CA 92373

E-mail: avijit\_sarkar <at> redlands <dot> edu Phone: (909) 748-8783 Web: http://www.redlands.edu/study/schools-and-centers/business/faculty/avijit-sarkar/

### Education

- Ph.D. in Industrial Engineering,
  Department of Industrial Engineering, SUNY at Buffalo, Buffalo NY, June 2002 August 2004
- M.S. in Industrial Engineering,
  Department of Industrial Engineering, SUNY at Buffalo, Buffalo NY, September 2000 May 2002
- B. E. (Bachelor of Engineering) in Production Engineering, Jadavpur University, Calcutta, India, August 1996 - June 2000

# Academic Experience

- Professor: July 2016 Present School of Business, University of Redlands, Redlands CA.
- Director of Graduate Programs, School of Business, University of Redlands, July 2016 June 2018
  School was accredited by ACBSP for the first time in Nov Dec 2017.
- Director, Center for Business GIS and Spatial Analysis (GISAB), September 2012 December 2016 [http://www.redlands.edu/businessGIS]
- Associate Professor: July 2010 June 2016
  School of Business, University of Redlands, Redlands CA.
- Assistant Professor: July 2005 June 2010
  School of Business, University of Redlands, Redlands CA.
- Director of Undergraduate Programs: July 2007 June 2011. School of Business, University of Redlands, Redlands CA.
- Visiting Assistant Professor: August 2004 May 2005
  Mechanical, Industrial & Manufacturing Engineering Department, University of Toledo, Toledo OH.

**Research Interests**: ICT Utilization and Digital Divides, Location Aspects of the Sharing Economy, Location Analytics with Big Data, Business GIS, Applied Operations Research.

#### Book

J. Pick, & A. Sarkar (2015). The Global Digital Divides: Explaining Change. New York: Springer.

#### Refereed Journal Articles

- 1. J.B. Pick, O. Turetken, A.V. Deokar, A. Sarkar, "Location analytics and decision support: Reflections on recent advancements, a research framework, and the path ahead", *Decision Support Systems*, 2017, 99, 1-8.
- 2. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "Factors affecting the decision to participate in study abroad programs in business schools: An exploratory study of two universities", *Journal of Teaching in International Business*, 2016, 27(2-3): 124-141.
- 3. D. Farkas, B. Hilton, J. Pick, H. Ramakrishna, A. Sarkar, N. Shin, "A tutorial on geographic information systems: A ten-year update", *Communications of the Association for Information Systems*, 2016, 38: 190-234.
- 4. J. Pick, A. Sarkar, J. Johnson, "United States digital divide: State level analysis of spatial clustering and multivariate determinants of ICT utilization", *Socio-Economic Planning Sciences*, 2015, 49: 16-32.

Sarkar CV, Mar-19 1/11

- 5. T. Nishida, J. Pick, A. Sarkar, "Spatial and multivariate analysis of Japan's prefectural digital divide", *Telecommunications Policy*, 2014, 38(11): 992–1010.
- 6. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "Infusion of GIS and spatial analysis in business school curricula: A status report", *Journal of Informatics Education Research*, Spring/Fall 2010.
- 7. A. Sarkar, R. Batta, R. Nagi, "Finding rectilinear least cost paths in the presence of convex polygonal congested regions", *Computers and Operations Research*, 2009, 36: 737-754.
- 8. M. Kaboudan, A. Sarkar, "Forecasting prices of single family homes using GIS-defined neighborhoods", *Journal of Geographical Systems*, 2008, 10(1): 23-45.
- 9. A. Sarkar, R. Batta, R. Nagi, "Placing a finite size facility with a center objective on a rectilinear plane with barriers", *European Journal of Operational Research*, 2007, 179(3): 1160-1176.
- 10. A. Sarkar, R. Batta, R. Nagi, "Planar area location/layout problem in the presence of generalized congested regions with the rectilinear distance metric", *IIE Transactions*, 2005, 37(1): 35-50.
- 11. A. Sarkar, R. Batta, R. Nagi, "Commentary on facility location in the presence of congested regions under the rectilinear distance metric", *Socio-Economic Planning Sciences*, 2004, 38(4): 291-306.

# **Refereed Book Chapters**

- 1. Pick, J.B., & Sarkar, A. (2019). Geographies of Global Digital Divides. In Warf, B. (Ed.), *Handbook on Geographies of the Internet*. Edward Elgar (forthcoming).
- 2. Skaletsky, M., Pick, J.B., Sarkar, A., and Yates, D. (2018). Digital Divides: Past, Present, and Future. In Galliers, R.D. and Stein, M-K. (Eds.), *The Routledge Companion to Management Information Systems* (416-443). London, England: Routledge.
- 3. Pick, J.B., & Sarkar, A. (2018). Global Digital Divides. In Warf, B. (Ed.), *The SAGE Encyclopedia of the Internet* (217-225). Thousand Oaks, California: SAGE.
- 4. Sarkar, A., Pick, J.B., & Rosales, J. (2017). ICT-enabled E-Entertainment Services in United States Counties: Socio-economic Determinants and Geographic Patterns, in Choudrie J., Kurnia, S. and Tsatsou, P. (Eds.), Social Inclusion and Usability of ICT-enabled services (115-146). London, England: Routledge.
- 5. Pick, J.B., Nishida, T., & Sarkar, A. (2014). Broadband Utilization in the Indian States: Socio-Economic Correlates and Geographic Aspects, in Jyoti Choudrie and Catherine Middleton (Eds.), *Management of Broadband Technology Innovation*. (269-296). Oxford, England: Routledge.
- 6. Ramakrishna, H., Sarkar, A., & Bachani, B. (2009). Business Analytics Success: A Conceptual Framework and an application to Virtual Organizing, in C. Camison, D. Palacios, F. Garrigos, & C. Devece (Eds.), Connectivity and Knowledge Management in Virtual Organizations: Networking and Developing Interactive Communications (222-254). Hershey PA: Information Science Reference.

# Manuscript under Review/Preparation

- 1. A. Sarkar, N. Shin, H. Ramakrishna, J. Pick, B. Hilton, and D. Farkas, Adoption of GIS and Location Analytics in MIS Research: Current Trends and Opportunities", under review, Communications of the Association for Information Systems, March 2019.
- 2. A. Sarkar, M. Koohikamali, and J. Pick, "Spatial and Socioeconomic Analysis of Host Participation in the Shared Accommodation Economy Airbnb in New York City", under review, *Information Technology and People*, Oct 2018.
- 3. A. Sarkar, M. Koohikamali, and J. Pick, "Spatiotemporal Patterns and Socioeconomic Dimensions of Shared Accommodations: The Case of Airbnb in Los Angeles, California", under preparation.
- 4. A. Sarkar, J. Pick, J. Johnson, "A Multivariate and Geospatial Analysis of ICT Utilization and the Digital Divide in the African Nations", under preparation.

Sarkar CV, Mar-19 2/11

### **Publications in Refereed Conference Proceedings**

- 1. A. Sarkar, M. Koohikamali, J. Pick, "Spatial and Socioeconomic Analysis of Host Participation in the Shared Accommodation Economy Airbnb in New York City", Proceedings of the 52<sup>nd</sup> Hawaii International Conference on System Sciences (HICSS), January 2019, pp. 4511-4522.
- 2. J. Pick, A. Sarkar, J. Rosales, "Social Media Utilization in U.S Counties: A Spatial and Multivariate Analysis", In Proceedings of the 49<sup>th</sup> Annual Meeting of the Decision Sciences Institute, Chicago, November 2018.
- 3. J. Pick, A. Sarkar, E. Parrish, "Internet Use and Online Activities in U.S. States: Geographic Disparities and Socio-economic Influences", In Proceedings of the 51<sup>st</sup> Hawaii International Conference on System Sciences (HICSS), IEEE, January 2018, pp. 3853-3863.
- 4. A. Sarkar, J.B. Pick, E. Parrish, "Spatial Patterns and Socioeconomic Dimensions of Internet Use in U.S. States: Implications for the Digital Divide", In Proceedings of the 48<sup>th</sup> Annual Meeting of the Decision Sciences Institute, Washington, D.C., November 2017.
- 5. A. Sarkar, J.B. Pick, E. Parrish, "Geographic Patterns and Socio-Economic Influences on Internet Use in U.S. States: A Spatial and Multivariate Analysis", In Proceedings of the 45<sup>th</sup> Telecommunications Policy Research Conference (TPRC), September 2017 (Available at SSRN: https://ssrn.com/abstract=2942292).
- 6. J. Pick, A. Sarkar, E. Parrish, "The Digital Divide in Latin America and the Caribbean: A Multivariate and Geospatial Analysis", Proceedings of the 23<sup>rd</sup> Americas Conference on Information Systems, Boston MA, August 2017.
- 7. Sarkar, A., Koohikamali, M., and Pick, J. B., "Spatiotemporal Patterns and Socioeconomic Dimensions of Shared Accommodations: The Case of Airbnb in Los Angeles, California", ISPRS Annals of Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume IV-4/W2, August 2017, pp. 107-114.
- 8. A. Sarkar, J. Pick, and G. Moss, "Geographic Patterns and Socio-Economic Influences on Mobile Internet Access and Use in United States Counties", Proceedings of the *50*<sup>th</sup> Hawaii International Conference on System Sciences (HICSS), IEEE, January 2017, pp. 4148-4158.
- 9. J. Pick, A. Sarkar, J. Rosales, "Internet Use for E-Commerce in US Counties: Geographic Patterns and Socio-Economic Influences", 47<sup>th</sup> Annual Meeting of the Decision Sciences Institute, Austin TX, November 2016.
- 10. A. Sarkar, J. Pick, J. Rosales, "Multivariate and Geospatial Analysis of Technology Utilization in US Counties", Proceedings of the 22<sup>nd</sup> Americas Conference on Information Systems, San Diego CA, August 2016. [Was recognized as Second Runner-up for Conference Best Paper Award]
- 11. Sarkar, A., and J. Pick, "The Information Societies of China and India: Multivariate and Geospatial Comparison and Implications for the Digital Divide", Proceedings of the *Western Decision Sciences Institute*, Las Vegas NV, Apr 2016.
- 12. J. Pick, and Sarkar, A., "Theories of the Digital Divide: Critical Comparison", Proceedings of the 49<sup>th</sup> Hawaii International Conference on System Sciences (HICSS), January 2016, pp. 3888-3897.
- 13. A. Sarkar, J. Pick, J. Johnson, "Africa's Digital Divide: Geography, Policy, and Implications", *International Telecommunications Society Regional Conference*, Los Angeles CA, Oct 2015.
- 14. Sarkar, A., J. Pick, and Johnson, J. "ICT Adoption and Utilization in US Counties: Socio-economic and Geographical Influences", Proceedings of the *Western Decision Sciences Institute*, Maui HI, Apr 2015.
- 15. A. Sarkar, J. Pick, "A Model and Case Analysis of Geographical Information Systems Curricula in Management Schools", 20<sup>th</sup> Americas Conference on Information Systems, Savannah GA, Aug 2014.
- 16. J. Pick, Sarkar, A., and Johnson, J. "A Multivariate and Geospatial Analysis of ICT Utilization and the Digital Divide in African Nations", Proceedings of the *Western Decision Sciences Institute*, Napa CA, April 2014.

Sarkar CV, Mar-19 3/11

- 17. J. Pick, Sarkar, A., and Johnson, J. "Information technology availability and use in the United States: A multivariate and geospatial analysis by state", Proceedings of the *Hawaiian International Conference on System Sciences*, IEEE, January 2014.
- 18. A. Sarkar, H. Ramakrishna, B. Vijayaraman, "Examining the Integration of Operations Research and GIS", 44<sup>th</sup> Annual Meeting of the Decision Sciences Institute, Baltimore MD, November 2013.
- 19. A. Sarkar, J. Pick, "GIS in Business School Curricula: Trends and a Case Study", 29<sup>th</sup> Information Systems Educators Conference (ISECON), New Orleans LA, November 2012.
- 20. A. Sarkar, H. Ramakrishna, B. Vijayaraman, "A profile of OR-GIS journal publications: History and trends", 43<sup>rd</sup> Annual Meeting of the Decision Sciences Institute, San Francisco CA, November 2012.
- 21. T. Nishida, J. Pick, A. Sarkar, "Spatial and Multivariate Analysis of Japan's Prefectural Digital Divide", 18<sup>th</sup> Americas Conference on Information Systems, Seattle WA, August 2012.
- 22. A. Sarkar, H. Ramakrishna, B. Vijayaraman, "Factors affecting the decision to participate in study abroad programs in business schools: An exploratory study of two universities", 41st Annual Meeting of the Western Decision Sciences Institute, Big Island HI, April 2012.
- 23. C. Chen, M. MacQueen, R. Rawding, K. Roberts, A. Sarkar, J. Spee, "Increasing management bandwidth through short term international travel courses" (Symposium), 53<sup>rd</sup> *Annual Meeting of the Western Academy of Management*, La Jolla CA, March 2012.
- 24. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "A comparison of infusion of GIS and spatial analysis concepts among AACSB and non-AACSB business schools", 40<sup>th</sup> Annual Meeting of the Western Decision Sciences Institute, Portland OR, April 2011.
- 25. A. Sarkar, A. Desmarais, M. Wong, "Identification & spatial analysis of logistics clusters in southern California", 39<sup>th</sup> Annual Meeting of the Western Decision Sciences Institute, Lake Tahoe NV, Apr 2010.
- 26. A. Sarkar, R. Greene, "Trade Area Analysis for a Hispanic Bridal Magazine", Business Educators Track, ESRI Business GIS Summit, San Diego CA, 2009.
- 27. A. Sarkar, S. Thosar, "Spatial Characteristics of IPO Firms", *Business Educators Track, ESRI Business GIS Summit*, San Diego CA, 2009.
- 28. A. Sarkar, "A Survey of GIS Applications in Operations Research", 38<sup>th</sup> Annual Meeting of the Western Decision Sciences Institute, Kauai HI, 2009.
- 29. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "Spatial Analysis and GIS Infusion in Business School Curriculum", *ESRI Business GIS Summit*, Chicago IL, 2008.
- 30. H. Ramakrishna, A. Sarkar, J. Bachani, "A Conceptual Framework for Business Analytics Success", 37<sup>th</sup> Annual Meeting of the Western Decision Sciences Institute, San Diego CA, 2008.
- 31. M. Kaboudan, A. Sarkar, "A GIS Framework to Forecast Residential Home Prices", 23<sup>rd</sup> Annual Meeting of the American Real Estate Society, San Francisco CA, 2007.
- 32. A. Sarkar, R. Batta, R. Nagi, "The Planar Area Location/Layout Problem", 13<sup>th</sup> Industrial Engineering Research Conference, Houston TX, May 2004.
- 33. A. Sarkar, R. Batta, R. Nagi, "Placement of a Finite-sized Center Facility in the Presence of Barriers to Rectilinear Travel", 12<sup>th</sup> Industrial Engineering Research Conference, Portland OR, May 2003.
- 34. A. Sarkar, R. Batta, R. Nagi, "Facility Location/Placement in the Presence of Congested Regions", 11<sup>th</sup> Industrial Engineering Research Conference, Orlando FL, May 2002.

# Research Presentations at Professional Meetings and Conferences

- 1. A. Sarkar, M. Koohikamali, J. Pick, "Spatial Patterns and Socioeconomic Dimensions of Short-term Shared Accommodations: The Case of Airbnb in Los Angeles and New York City", *INFORMS Annual Meeting*, Phoenix AZ, November 2018.
- 2. C. Lewinski and A. Sarkar, "Collaborative Development for Effective Online Learning: An Online MBA Case Study", *Online Learning Consortium Annual Conference*, Orlando FL, November 2018.

Sarkar CV, Mar-19 4/11

- 3. S. Griffin, J. Pick, H. Ramakrishna, A. Sarkar, "Location Analytics in Business Curricula Through the Lens of Big and Small Data", *Esri Education GIS Conference*, San Diego CA, July 2018.
- 4. A. Sarkar, K. Takeda, "Using Mapping and Geospatial Information Systems to Create a 'Heart String' with IISE LA Chapter Members/Customers", *IISE Annual Conference*, Orlando FL, May 2018.
- 5. M. Koohikamali, A. Sarkar, J. Pick, "Motivations to participate in sharing economy: How location matters?", *Americas Conference on Information Systems*, Boston MA, August 2017.
- 6. G. Moss, A. Sarkar, J. Pick, "Spatial Patterns of m-Commerce and m-Entertainment in U.S. Counties", *Esri User Conference*, San Diego CA, July 2017.
- 7. J. Lemus, A. Sarkar, J. Pick, H. Ramakrishna, "Infusion of Location Analytics with Big Data in Business Curricula", *Esri Education GIS Conference*, San Diego CA, July 2017.
- 8. A. Sarkar, J. Pick, J. Rosales, "Socioeconomic Determinants and Geographic Patterns of Internet Use for E-commerce in U.S. Counties", *INFORMS Annual Meeting*, Nashville TN, November 2016.
- 9. J. Pick, A. Sarkar, J. Rosales, "Geographies of E-Commerce and E-Entertainment in US Counties: Spatial Patterns and Socio-Economic Influences", 3<sup>rd</sup> International Conference on CyberGIS and Geospatial Data Science, Urbana IL, June 2016.
- 10. J. Pick, A. Sarkar, J. Rosales, "Spatial Analysis and Socioeconomic Determinants of Web-Based E-Commerce and E-Entertainment Usage in the Counties of the United States", *Annual Meeting of the Association of American Geographers*, San Francisco CA, March 2016.
- 11. A. Sarkar, J. Pick, "A Comparison of the Information Societies of China and India", 46<sup>th</sup> Annual Meeting of the Decision Sciences Institute, Seattle WA, November 2015.
- 12. A. Sarkar, "Medical Devices Manufacturing: Implications for the Coachella Valley", *ESRI International User Conference*, San Diego CA, July 2015.
- 13. J. Pick, A. Sarkar, J. Johnson, "Global Digital Divide: Geographic Patterns and Rapid Change, 2000-2013", *Annual Meeting of the Association of American Geographers*, Chicago IL, April 2015.
- 14. A. Sarkar, J. Pick, L. Florkowski, "Correlates of ICT Adoption and Utilization in US Counties", 45<sup>th</sup> Annual Meeting of the Decision Sciences Institute, Tampa FL, November 2014.
- 15. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "GIS and Spatial Analysis Across the Curriculum in Business Schools", 45<sup>th</sup> Annual Meeting of the Decision Sciences Institute, Tampa FL, November 2014.
- 16. A. Sarkar, H. Ramakrishna, "Value of Spatial Decision Support in Operations Research", *INFORMS Annual Meeting*, San Francisco CA, November 2014.
- 17. J. Pick, Sarkar, A., and Johnson, J. "The Digital Divide in Africa: A Spatial and Multivariate Analysis of ICT Adoption and Utilization", *Annual Meeting of the Association of American Geographers*, Tampa FL, April 2014.
- 18. F. Miller, A. Sarkar, J. Pick, "Integrating Location Analytics in Business School Curricula: Two Visions", *Esri Education GIS Conference*, San Diego CA, July 2014.
- 19. A. Sarkar, H. Ramakrishna, "Integrating Operations Research and GIS: Paradigms and Implications for Value Addition", *INFORMS Annual Meeting*, Minneapolis MN, October 2013.
- 20. A. Sarkar, H. Ramakrishna, "Business analytics in the liberal arts", *INFORMS Annual Meeting*, Minneapolis MN, October 2013.
- 21. A. Sarkar, H. Ramakrishna, "GIS & Spatial Analysis in business curriculum", 19th Americas Conference on Information Systems (Workshop on Geographic Information Systems), Chicago IL, August 2013.
- 22. J. Moenius, A. Sarkar, "The geographic profile of an economic crisis", *ESRI International User Conference*, San Diego CA, July 2013.
- 23. A. Sarkar, H. Ramakrishna, "Contributions of GIS in Vehicle Routing", *INFORMS Annual Meeting*, Phoenix AZ, November 2012.
- 24. J. Pick, T. Nishida, A. Sarkar, "Social and Economic Influences on Technology Utilization for the States of India: Multivariate and Spatial Analysis", *Annual Meeting of the Association of American Geographers*, New York NY, April 2012.

Sarkar CV, Mar-19 5/11

- 25. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "Factors informing students' decision to participate in study abroad programs in business schools: An exploratory research", 42<sup>nd</sup> Annual Meeting of the Decision Sciences Institute, Boston MA, November 2011.
- 26. A. Sarkar, H. Ramakrishna, "A Conceptual Framework of Analytics Success", Invited presentation at INFORMS Annual Meeting (in the "Topics in Analytics" cluster), Charlotte NC, November 2011. See <a href="http://www.youtube.com/watch?v=3-FY0CNtXRw&feature=BFa&list=UUCwr0VjkxPvbt9xNmKOHHFA">http://www.youtube.com/watch?v=3-FY0CNtXRw&feature=BFa&list=UUCwr0VjkxPvbt9xNmKOHHFA</a>.
- 27. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "A comparison of infusion of GIS and spatial analysis concepts among AACSB and non-AACSB business schools", 41<sup>st</sup> Annual Meeting of the Decision Sciences Institute (in the Cross-Functional Interfaces track), San Diego CA, November 2010.
- 28. H. Ramakrishna, A. Sarkar, "Logistics problems: Does GIS add value in location and routing?", 40<sup>th</sup> Annual Meeting of the Decision Sciences Institute (in the Supply Chain Management track), New Orleans LA, November 2009.
- 29. H. Ramakrishna, A. Sarkar, "Vehicle Routing Problems: Does GIS Add Value?", *INFORMS Annual Meeting (in the Vehicle Routing cluster)*, San Diego CA, October 2009.
- 30. A. Sarkar, R. Greene, "Trade Area Analysis for a Hispanic Bridal Magazine", *Business Educators Track, ESRI Business GIS Summit*, San Diego CA, 2009.
- 31. A. Sarkar, S. Thosar, "Spatial Characteristics of IPO Firms", *Business Educators Track, ESRI Business GIS Summit*, San Diego CA, 2009.
- 32. A. Sarkar, "A Survey of GIS Applications in Operations Research", *38<sup>th</sup> Annual Meeting of the Western Decision Sciences Institute*, Kauai HI, 2009.
- 33. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "Infusion of spatial analysis and GIS in business school curriculum: A status report", 39<sup>th</sup> Annual Meeting of the Decision Sciences Institute (in the Curriculum & Course Management track), Baltimore MD, November 2008.
- 34. A. Sarkar, "Spatial Analysis in OR/MS Curriculum", *INFORMS Annual Meeting (in the INFORM-ED cluster)*, Washington D.C., October 2008.
- 35. H. Ramakrishna, J. Bachani, A. Sarkar, "Business Analytics Success: A Conceptual Framework", *Academy of Management Annual Meeting*, Anaheim CA, August 2008.
- 36. A. Sarkar, "Spatial Analysis in Management Science and Operations Management", *ESRI Business GIS Summit*, Chicago IL, April 2008.
- 37. M. Kaboudan, A. Sarkar, "A GIS Framework to Forecast Residential Home Prices", 23<sup>rd</sup> Annual Meeting of the American Real Estate Society, San Francisco CA, March 2007.
- 38. A. Sarkar, R. Batta, R. Nagi, "Finding Rectilinear Least Cost Paths with Convex Polygonal Congested Regions", invited (*Location Modeling session sponsored by Location Analysis cluster*) presentation in the *INFORMS Fall 2004 Conference*, Denver CO, October 2004.
- 39. A. Sarkar, R. Batta, R. Nagi, "The Planar Area Location/Layout Problem", 13<sup>th</sup> Industrial Engineering Research Conference, Houston TX, May 2004.
- 40. A. Sarkar, R. Batta, R. Nagi, "Planar Area Location/Placement in the Presence of Generalized Congested Regions", invited (*Location Modeling session sponsored by Location Planning cluster*) presentation in the *INFORMS Fall 2003 Conference*, Atlanta GA, October 2003.
- 41. A. Sarkar, R. Batta, R. Nagi, "Placement of a Finite-sized Center Facility in the Presence of Barriers to Rectilinear Travel", 12<sup>th</sup> Industrial Engineering Research Conference, Portland OR, May 2003.
- 42. A. Sarkar, R. Batta, R. Nagi, "Facility Location in the Presence of Congested Regions", invited (sponsored by Facilities Planning and Design/Manufacturing Systems cluster) presentation in the INFORMS Fall 2002 Conference, San Jose CA, November 2002.
- 43. A. Sarkar, R. Batta, R. Nagi, "Facility Location/Placement in the Presence of Congested Regions", 11<sup>th</sup> Industrial Engineering Research Conference, Orlando FL, May 2002.

Sarkar CV, Mar-19 6/11

### Other Academic Presentations at Professional Meetings and Conferences

- 1. Workshop, "Big Data and Location Analytics", Americas Conference on Information Systems, San Juan PR, 2015 (Co-presenter with B. Hilton, D. Farkas, J. Pick, H. Ramakrishna, N. Shin).
- 2. Workshop, "Geographic Information Systems for Smart Sustainability", Americas Conference on Information Systems, Savannah GA, 2014 (Co-presenter with B. Hilton, D. Farkas, J. Pick, H. Ramakrishna, N. Shin).
- 3. Workshop, "Geographic Information Systems", Americas Conference on Information Systems, Chicago IL, 2013 (Co-presenter with D. Farkas, J. Pick, H. Ramakrishna, N. Shin).

# Research Presentations at University of Redlands (Faculty Forum, SB Research Series, etc.)

- 1. A. Sarkar, "An Examination of Global Digital Divides", University of Redlands "Our House" Event, Redlands CA, May 2015.
- 2. J. Pick, A. Sarkar, J. Glover, "A Multivariate and Geospatial Analysis of the Digital Divide in the African Nations", University of Redlands Faculty Forum, Redlands CA, March 2015.
- 3. A. Sarkar, H. Ramakrishna, "Integrating Operations Research and GIS: Paradigms and Implications for Value Addition", School of Business Research Series, Redlands CA, December 2013.
- 4. A. Sarkar, J. Pick, J. Johnson, "Information Technology Availability and Use in the US: A Multivariate and Geospatial Analysis by State", School of Business Research Series, Redlands CA, November 2013.
- 5. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "A comparison of infusion of GIS and spatial analysis concepts among AACSB and non-AACSB business schools", School of Business Research Series, Redlands CA, May 2011.
- 6. H. Ramakrishna, A. Sarkar, "Evolution of GIS and Spatial Analysis in Operations Research applications to business", School of Business Research Series, Redlands CA, April 2010.
- 7. A. Sarkar, R. Greene, "Trade Area Analysis for a Hispanic Bridal Magazine", School of Business Research Series, Redlands CA, January 2010.
- 8. A. Sarkar, "Give Your Business a Strategic Advantage Using Spatial Business Intelligence and Electronic Mapping", GIS Workshop (sponsored by Whitehead Leadership Society), San Diego CA, July 2009 (M. Perry was co-presenter).
- 9. A. Sarkar, S. Thosar, "Spatial Characteristics of IPO firms", School of Business Research Series, Redlands CA, March 2009.
- 10. H. Ramakrishna, A. Sarkar, "Infusion of Spatial Analysis and GIS in B-School Curriculum", University of Redlands Faculty Forum, Redlands CA, October 2008.
- 11. H. Ramakrishna, A. Sarkar, J. Bachani, "A Conceptual Framework for Business Analytics Success", School of Business Research Series, Redlands CA, May 2008.
- 12. A. Sarkar, "Effectively Market Your Business Using Electronic Maps: GIS in Logistics", Inland Empire Small Business Development Center (IESBDC) Workshop (co-sponsored by University of Redlands), Riverside CA, May 2007.
- 13. A. Sarkar, "Incorporating Geographic Information Systems (GIS) into the Business School: Our Experience at University of Redlands", Business Leadership Symposium, Burbank CA, August 2006.
- 14. M. Kaboudan, A. Sarkar, "Spatial Price Index Modeling with Application to Forecasting Home Prices", School of Business Research Series, Redlands CA, March 2006.
- 15. A. Sarkar, "Least Cost Path Problem in the Presence of Congestion", MS-GIS Colloquium, Redlands CA, September 2005.

Sarkar CV, Mar-19 7/11

#### Grants

### Funded

- 1. Horan, T., Pick, J., and Sarkar, A. "Spatial Business Initiative, funded by Esri, January 2018—Present, \$400,000, Role: co-Pl.
- 2. Sarkar, A., Moenius, J., and Spee, J. "Coachella Valley Business Incubator/Accelerator Network" coapplicant with Coachella Valley Economic Partnership, funded by U.S. Department of Commerce, Economic Development Administration, October 2013–February 2015, \$84,714, Role: co-PI.
- 3. Sarkar, A., Pick, J., and Ramakrishna, H. "Big Data and Location Analytics in Business Curricula", funded by University of Redlands Spatial Communities of Practice Grant program, June 2015—May 2017, \$20,000, Role: co-Pl.
- 4. Sarkar, A. "Technology Diffusion and Digital Divide in Latin American and Caribbean Nations", funded by University of Redlands Faculty Review Committee Grant program, July 2015–June 2016, \$2,000.

Recipient of other research and travel grants awarded by the University of Redlands School of Business Research Committee, 2005 – 2015.

#### Not Funded

- 1. "Assimilation and the Impact of ICTs in the Arab World: Implications for Aspiring Knowledge-based Economies", submitted to Qatar National Research Foundation's National Priorities Research Program (NPRP) Cycle 8, 2015, \$497,008, Role: Lead Principal Investigator (LPI) with as part of University of Redlands (Dr. J. Pick, PI) Qatar University (Dr. A. Fadlalla, LPI & Dr. M. Elbashir, PI) Research Team.
- 2. "A Proposal to Study the Movement of Goods in the Sacramento Area", submitted to Sacramento Area Council of Governments, 2006, \$144,448, Role: Faculty Consultant as part of University of Redlands (Redlands Institute) Research Team.

#### **Other Scholarly Reports**

- 1. A. Sarkar, "Advanced Manufacturing Industry Assessment: Opportunities and Implications for Economic Development in the Coachella Valley, CA", US Department of Commerce grant report, submitted to Coachella Valley Economic Partnership (CVEP), March 2015.
- 2. A. Sarkar, "Medical Devices Manufacturing Industry Assessment: Opportunities and Implications for Economic Development in the Coachella Valley, CA", US Department of Commerce grant report, submitted to Coachella Valley Economic Partnership (CVEP), March 2015.
- 3. A. Sarkar, R. Greene, "BODAS La Revista USA: Trade Area Analysis for a Hispanic Bridal Magazine", a small business case study report prepared for the *U.S. Small Business Administration Grant No. SBAHQ-06-1-0046*, August 2009. This report has been published online at the University of Redlands Small Business Spatial Resource Center & can be accessed at <a href="http://business.redlands.edu/grant/BODAS">http://business.redlands.edu/grant/BODAS</a> Bridal Magazine.pdf.
- 4. A. Sarkar, "GIS in Logistics: A Literature Review", a report prepared for the *U.S. Small Business Administration Grant No. SBAHQ-06-1-0046*, May 2007. This report has been published online at the University of Redlands Small Business Spatial Resource Center and can be accessed at <a href="http://business.redlands.edu/grant/Logistics.pdf">http://business.redlands.edu/grant/Logistics.pdf</a>.

### **Teaching Experience**

- At University of Redlands
  - 1. INFT 647, *Business Analytics*, (MS in IT), 4 units, 2016 Present.
  - MGMT 651, Management Science & Decision Analysis, (MBA), 4 units, 2005-Present.

Sarkar CV, Mar-19 8/11

- 3. MGMT 661, *Introduction to Analytics and Decision Making*, (MA in Management), 4 units, 2006-Present.
- 4. BUSB 370, Managing Quality and Operations, (BS in Business), 4 units, 2005-Present.
- 5. INFT 676, Bangalore Study: Global IT Services Marketplace, graduate (MBA, MAM), 4 units, 2012.
- 6. BAMG 232, *Data Analysis and Decision Making for Managers*, (BS in Management), 4 units, 2009-Present.
- 7. BUAD 680B, *Resources Module B: Resource Choices, Constraints, and Risks*, graduate (daytime MBA), 3 units, 2007-2008.

### At University of Toledo

- 1. MIME 4100/5100, Manufacturing Systems Simulation, senior/graduate, 3 units, Spring 2005 (10 students).
- 2. MIME 2600, Engineering Economics, sophomore, 3 units, Spring 2005 (94 students) and Fall 2004 (71 students).
- 3. MIME 4160, Facilities Planning and Design, senior, 3 units, Fall 2004 (11 students)
- 4. MIME 4070/5070, Computer Aided Manufacturing, senior/graduate, 3 units, Spring 2005 (5 students) and Fall 2004 (15 students).

### • At University at Buffalo, The State University of New York

1. IE 373, Introduction to Operations Research: Deterministic Models, 3 units, Fall 2003 (26 students) and Fall 2002 (23 students), Department of Industrial Engineering.

# Course Syllabi Developed/Revised at University of Redlands

- INFT 647 Business Analytics; New course in MSIT program, 2014-15.
- MGMT 651 Analytics for Managerial Decision-Making; Core course in Online MBA program, 2014-15.
- BAMG 232 Data Analysis and Decision Making for Managers; New course in Bachelor of Science in Management program.
- BUAD 680B Resources Module B: Resource Choices, Constraints, and Risks; New course in daytime MBA program.
- MGMT 661 Introduction to Analytics and Decision Making; *substantial revision* of old course syllabus for Master of Arts in Management program.
- MGMT 650 & BUSB 370 Management Science and Decision Analysis & Managing Quality and Operations; *revised* old course syllabi to adapt from 6-to-8 week format.

# Service Activities at University of Redlands

# <u>University-wide</u>

- *Member,* Faculty Search Committee, Tenure-track position in Education Leadership and Administration, School of Education, 2016-17.
- Member, University Council on Inclusiveness and Community (UCIC) (Jan 2016 June 2017).
- *Member, Faculty Senate* (September 2014 June 2016).
- Member, Committee on Academic Planning and Standards (AY 2014-16, Chair AY 2015-16).
- Member, School of Continuing Studies Curriculum Committee (2012–2014).
- Member, Council for Spatial Studies (September 2013 Present).
- Member, Search Committee for Director of Spatial Studies, 2012-13.
- Member, Academic Review Board (2009–2011).

Sarkar CV, Mar-19 9/11

#### School of Business

- Director of Graduate Programs, July 2016 June 2018.
  - o School secured ACBSP accreditation in Nov Dec 2017.
- *Member,* Strategic Planning Taskforce, Jan June 2018.
- Member, ACBSP Accreditation Taskforce, July 2016 Dec 2017.
- Member, Faculty Search Committee, Tenure-track position in Economics, School of Business, 2016 17
- Co-chair, Faculty Search Committee, Tenure-track position in IS-GIS, School of Business, 2015-16.
- Director, Center for Business GIS and Spatial Analysis (September 2012 December 2016).
- Member, Search Committee for Research Economist for Institute for Spatial Economic Analysis, 2013-14.
- Member, MBA Program Assessment and Review Taskforce (2013-15).
- Member, Undergraduate Programs Assessment and Review Taskforce (2011-13).
- Director of Undergraduate Programs, School of Business (July 2007 June 2011).
  - o Led faculty during the design and creation of a new undergraduate degree completion program, *Bachelor of Arts in Management* (BAM) during 2007 2008.
- Member, School of Business Awards Committee (July 2009-2013); Chair in 2010-11.
- Member, School of Business Curriculum Committee (July 2007-09).
- Member, School of Business Admissions Review Committee (July 2005-2011).
- U. S. Small Business Administration (SBA) grant (Fall 2006 -Summer 2009)
  - o Faculty Co-Lead of small business BODAS La Revista USA case study: conducted GIS-enabled spatial analysis of business operations, July 2008-09 (work done in collaboration with R. Greene, Northern Illinois University).
- *Member,* Faculty Search Committee (Information Systems), School of Business, University of Redlands, 2005-06.
- *Member, Faculty Search Committee (Geographic Information Systems)*, School of Business, University of Redlands, 2005-06.

### Student Supervision at University of Redlands

- Alexia Vincent, Undergraduate in Business Administration program in College of Arts and Sciences, Member of Honors Thesis Committee (Chair Pete Bergevin), 2015.
- Lisa Florkowski, Graduate student in MS-GIS program in the College of Arts and Sciences, Member of Major Individual Project Committee (Chair Fang Ren), 2014.
- Brian Shaw, Graduate student in MS-GIS program in the College of Arts and Sciences, Member of Major Individual Project Committee (Chair Karen Kemp), 2006.

### Student Supervision at University of Toledo (2004–05)

- Vijitashwa Pandey, Sridhar Thatipalli, Chetan Choutakuri, Moyeen Mohammed all M.S. students in Mechanical, Industrial & Manufacturing Engg. Department: member of Masters Thesis Committees.
- Jason Hoyng, Marissa Zyduck, Heidi Lucius, Heather Ritz, Brian Kistler and Chris Stogran all seniors, member of Senior Design Project Committees.

#### Service Contribution at the University of Toledo

 Member, Ph.D. Comprehensive Examination Committee, Mechanical, Industrial & Manufacturing Engg. Department (2005).

Sarkar CV, Mar-19 10/11

#### Review Activities for Journals, Conferences and Professional Societies

- Journals (in alphabetical order)
  - o Annals of Operations Research, 2005 (1 paper), 2011 (1 paper).
  - o Asia-Pacific Journal of Operational Research, 2006 (1 paper).
  - o Computers and Operations Research, 2011 (1 paper), 2013 (1 paper).
  - o IIE Transactions, 2010 (1 paper), 2009 (1 paper), 2006 (2 papers).
  - o International Journal of Production Research, 2015 (1 paper).
  - o Journal of Global Information Technology Management, 2018 (1 paper).
  - o Journal of Information Systems Education, 2013 (2 papers).
  - o Journal of Maps, 2009 (1 paper).
  - o Papers in Applied Geography, 2015 (1 paper).
  - o Transportation Science, 2011 (1 paper).

#### Conferences

- o Regular reviewer for Annual Meetings of the Decision Sciences Institute, Annual Meetings of the Western Decision Sciences Institute.
- o European Conference on Information Systems (ECIS), Barcelona, Spain, 2012 1 paper.
- o 2008 ESRI Business GIS Summit, Chicago, IL, 2008 (2 papers).
- o 17<sup>th</sup> IRMA International Conference, Washington, D.C., 2005 (2 papers).
- o 5<sup>th</sup> International Conference on Technology and Automation, Greece, 2005 (2 papers).
- Others: The Handbook of Technology Management, John Wiley & Sons, 2008 (1 chapter).

#### **Honors**

- 2016 Americas Conference on Information Systems (AMCIS): Co-author of "Multivariate and Geospatial Analysis of Technology Utilization in US Counties", recognized as 2<sup>nd</sup> runner-up for Best Conference Paper Award.
- At University of Redlands
  - o Recipient, Faculty Review Committee (University-wide) Award
    - For Outstanding Research, 2010.
    - For Outstanding Teaching, 2009.
  - o Recipient, School of Business Excellence in Research Award, 2015, 2011.
  - o Recipient, School of Business Excellence in Teaching Award, 2015, 2009.
  - o Recipient, School of Business Excellence in Service Award, 2011, 2018.
  - o Nominee, Faculty Review Committee (FRC) Award for Outstanding Teaching, 2007, 2008.
  - Nominee, Faculty Review Committee (FRC) Award for Outstanding Research, 2015.
  - o Nominee, School of Business Excellence in Teaching Award, 2006, 2007, 2010, 2011, 2013.
- At University at Buffalo, The State University of New York
  - o Recipient of Graduate Student Excellence in Teaching Award, 2003-2004, conferred by the Graduate School and the Graduate Student Association.
  - o Graduate Research Assistantship (sponsored by NSF) (2000, 2001, 2003, 2004).
  - o Graduate Teaching Assistantship (2001-2004).

#### **Academic Society Affiliations**

- Institute for Operations Research and the Management Sciences (INFORMS).
- Decision Sciences Institute (DSI).
- Association for Information Systems (AIS).

Sarkar CV, Mar-19 11/11