

AVIJIT SARKAR

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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.
- Co-PI, Spatial Business Initiative (A University of Redlands – Esri partnership), 2018 – Present.
- 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 Spatial Business (CSB), September 2012 – December 2016, Sep 2019 – Present.
[\[http://www.redlands.edu/businessGIS\]](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. Sarkar, A., Koohikamali, M. and Pick, J.B. (2020). Spatial and socioeconomic analysis of host participation in the sharing economy: Airbnb in New York City, *Information Technology & People*, 33(3), 983-1009.
2. Pick, J.B., Sarkar, A., & Rosales, J. (2019). Social Media Use in American Counties: Geography and Determinants. *ISPRS International Journal of Geo-Information*, 8(9), 424-448.
3. J.B. Pick, O. Turetken, A.V. Deokar, and A. Sarkar. (2017). Location analytics and decision support: Reflections on recent advancements, a research framework, and the path ahead, *Decision Support Systems*, 99, 1-8.

4. H. Ramakrishna, A. Sarkar, and B. Vijayaraman (2016). 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*, 27(2-3): 124-141.
5. D. Farkas, B. Hilton, J. Pick, H. Ramakrishna, A. Sarkar, and N. Shin. (2016). A tutorial on geographic information systems: A ten-year update, *Communications of the Association for Information Systems*, 38, 190-234.
6. J. Pick, A. Sarkar, and J. Johnson. (2015). United States digital divide: State level analysis of spatial clustering and multivariate determinants of ICT utilization, *Socio-Economic Planning Sciences*, 49, 16-32.
7. T. Nishida, J. Pick, and A. Sarkar. (2014). Spatial and multivariate analysis of Japan's prefectural digital divide", *Telecommunications Policy*, 38(11), 992-1010.
8. H. Ramakrishna, A. Sarkar, B. Vijayaraman. (2010). Infusion of GIS and spatial analysis in business school curricula: A status report", *Journal of Informatics Education Research*, Spring/Fall.
9. A. Sarkar, R. Batta, and R. Nagi. (2009). Finding rectilinear least cost paths in the presence of convex polygonal congested regions", *Computers and Operations Research*, 36, 737-754.
10. M. Kaboudan and, A. Sarkar (2008). Forecasting prices of single family homes using GIS-defined neighborhoods", *Journal of Geographical Systems*, 10(1), 23-45.
11. A. Sarkar, R. Batta, and R. Nagi. (2007). Placing a finite size facility with a center objective on a rectilinear plane with barriers, *European Journal of Operational Research*, 179(3), 1160-1176.
12. A. Sarkar, R. Batta, and R. Nagi. (2005). Planar area location/layout problem in the presence of generalized congested regions with the rectilinear distance metric", *IIE Transactions*, 37(1), 35-50.
13. A. Sarkar, R. Batta, and R. Nagi. (2004). Commentary on facility location in the presence of congested regions under the rectilinear distance metric, *Socio-Economic Planning Sciences*, 38(4), 291-306.

Refereed Book Chapters

1. Pick, J.B., & Sarkar, A. (2019). Geographies of Global Digital Divides. In Warf, B. (Ed.), *Geographies of the Internet*. Routledge (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. Pick, J.B., Sarkar, A, and Parrish, E. (2020). The Latin American and Caribbean Digital Divide: A Geospatial and Multivariate Analysis, under review, *Information Technology for Development*.

2. 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", to be submitted to *Journal of Computer Information Systems*.
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.

Publications in Refereed Conference Proceedings

1. H. Ramakrishna, A. Sarkar, and M. Perry. "CoffeePlus: An Analytics Case Study", Best Teaching Case Studies Award Finalist (1 of 3 Finalists), 50th Annual Meeting of the Decision Sciences Institute, New Orleans, November 2019.
2. H. Ramakrishna, A. Sarkar, B. Vijayaraman. "A Conceptual Model of Data-Driven Decision-Making Process: A Guide for Developing an Introductory MBA Core Course in Business Analytics", In Proceedings of the 50th Annual Meeting of the Decision Sciences Institute, New Orleans, November 2019.
3. A. Sarkar, and J.B. Pick, "Disparities in Purposeful Internet Use in U.S. States: Spatiotemporal Patterns and Socioeconomic Influences", In Proceedings of the 47th Telecommunications Policy Research Conference (TPRC), September 2019. (Available at SSRN: <https://ssrn.com/abstract=3427101>).
4. 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 52nd Hawaii International Conference on System Sciences (HICSS), January 2019, pp. 4511-4522.
5. J. Pick, A. Sarkar, J. Rosales, "Social Media Utilization in U.S Counties: A Spatial and Multivariate Analysis", In Proceedings of the 49th Annual Meeting of the Decision Sciences Institute, Chicago, November 2018.
6. 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 51st Hawaii International Conference on System Sciences (HICSS), IEEE, January 2018, pp. 3853-3863.
7. 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 48th Annual Meeting of the Decision Sciences Institute, Washington, D.C., November 2017.
8. 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 45th Telecommunications Policy Research Conference (TPRC), September 2017 (Available at SSRN: <https://ssrn.com/abstract=2942292>).
9. J. Pick, A. Sarkar, E. Parrish, "The Digital Divide in Latin America and the Caribbean: A Multivariate and Geospatial Analysis", Proceedings of the 23rd Americas Conference on Information Systems, Boston MA, August 2017.
10. 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.
11. 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 50th Hawaii International Conference on System Sciences (HICSS), IEEE, January 2017, pp. 4148-4158.
12. J. Pick, A. Sarkar, J. Rosales, "Internet Use for E-Commerce in US Counties: Geographic Patterns and Socio-Economic Influences", 47th Annual Meeting of the Decision Sciences Institute, Austin TX, November 2016.

13. A. Sarkar, J. Pick, J. Rosales, "Multivariate and Geospatial Analysis of Technology Utilization in US Counties", Proceedings of the 22nd Americas Conference on Information Systems, San Diego CA, August 2016. *[Was recognized as Second Runner-up for Conference Best Paper Award]*
14. 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.
15. J. Pick, and Sarkar, A., "Theories of the Digital Divide: Critical Comparison", Proceedings of the 49th Hawaii International Conference on System Sciences (HICSS), January 2016, pp. 3888-3897.
16. A. Sarkar, J. Pick, J. Johnson, "Africa's Digital Divide: Geography, Policy, and Implications", *International Telecommunications Society Regional Conference*, Los Angeles CA, Oct 2015.
17. 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.
18. A. Sarkar, J. Pick, "A Model and Case Analysis of Geographical Information Systems Curricula in Management Schools", 20th Americas Conference on Information Systems, Savannah GA, Aug 2014.
19. 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.
20. 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.
21. A. Sarkar, H. Ramakrishna, B. Vijayaraman, "Examining the Integration of Operations Research and GIS", 44th Annual Meeting of the *Decision Sciences Institute*, Baltimore MD, November 2013.
22. A. Sarkar, J. Pick, "GIS in Business School Curricula: Trends and a Case Study", 29th Information Systems Educators Conference (ISECON), New Orleans LA, November 2012.
23. A. Sarkar, H. Ramakrishna, B. Vijayaraman, "A profile of OR-GIS journal publications: History and trends", 43rd Annual Meeting of the *Decision Sciences Institute*, San Francisco CA, November 2012.
24. T. Nishida, J. Pick, A. Sarkar, "Spatial and Multivariate Analysis of Japan's Prefectural Digital Divide", 18th Americas Conference on Information Systems, Seattle WA, August 2012.
25. 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.
26. C. Chen, M. MacQueen, R. Rawding, K. Roberts, A. Sarkar, J. Spee, "Increasing management bandwidth through short term international travel courses" (Symposium), 53rd Annual Meeting of the *Western Academy of Management*, La Jolla CA, March 2012.
27. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "A comparison of infusion of GIS and spatial analysis concepts among AACSB and non-AACSB business schools", 40th Annual Meeting of the *Western Decision Sciences Institute*, Portland OR, April 2011.
28. A. Sarkar, A. Desmarais, M. Wong, "Identification & spatial analysis of logistics clusters in southern California", 39th Annual Meeting of the *Western Decision Sciences Institute*, Lake Tahoe NV, Apr 2010.
29. A. Sarkar, R. Greene, "Trade Area Analysis for a Hispanic Bridal Magazine", *Business Educators Track, ESRI Business GIS Summit*, San Diego CA, 2009.
30. A. Sarkar, S. Thosar, "Spatial Characteristics of IPO Firms", *Business Educators Track, ESRI Business GIS Summit*, San Diego CA, 2009.
31. A. Sarkar, "A Survey of GIS Applications in Operations Research", 38th Annual Meeting of the *Western Decision Sciences Institute*, Kauai HI, 2009.
32. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "Spatial Analysis and GIS Infusion in Business School Curriculum", *ESRI Business GIS Summit*, Chicago IL, 2008.

33. H. Ramakrishna, A. Sarkar, J. Bachani, "A Conceptual Framework for Business Analytics Success", *37th Annual Meeting of the Western Decision Sciences Institute*, San Diego CA, 2008.
34. M. Kaboudan, A. Sarkar, "A GIS Framework to Forecast Residential Home Prices", *23rd Annual Meeting of the American Real Estate Society*, San Francisco CA, 2007.
35. A. Sarkar, R. Batta, R. Nagi, "The Planar Area Location/Layout Problem", *13th Industrial Engineering Research Conference*, Houston TX, May 2004.
36. A. Sarkar, R. Batta, R. Nagi, "Placement of a Finite-sized Center Facility in the Presence of Barriers to Rectilinear Travel", *12th Industrial Engineering Research Conference*, Portland OR, May 2003.
37. A. Sarkar, R. Batta, R. Nagi, "Facility Location/Placement in the Presence of Congested Regions", *11th Industrial Engineering Research Conference*, Orlando FL, May 2002.

Research Presentations at Professional Meetings and Conferences

1. A. Sarkar, J. Pick, & Raut, T. "Purposeful Internet Use in the United States: Geodemographics of Internet Access, Use, and Impact", *INFORMS Annual Meeting*, Seattle WA, November 2019.
2. T. Horan, J. Pick, and A. Sarkar, "Spatial Business Workforce for Contemporary Businesses", *Esri Education GIS Conference*, San Diego CA, July 2019.
3. A. Sarkar, J. Pick, and T. Horan. "Location Value Chain, Spatial Business, Location Analytics, GIS, Spatial Business Transformation, Spatial Maturity", *AAG Annual Meeting*, Washington, D.C., April 2019.
4. A. Sarkar, M. Koohikamali, J. Pick, "Socioeconomic Analysis and Geographic Patterns of Host Participation in the Shared Accommodation Economy – Airbnb in Los Angeles", *SHARE (Sharing Economy – Humans, Automation, Resilience) Conference*, Boston MA, March 2019.
5. 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.
6. 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.
7. 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.
8. 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.
9. M. Koohikamali, A. Sarkar, J. Pick, "Motivations to participate in sharing economy: How location matters?", *Americas Conference on Information Systems*, Boston MA, August 2017.
10. 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.
11. 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.
12. 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.
13. J. Pick, A. Sarkar, J. Rosales, "Geographies of E-Commerce and E-Entertainment in US Counties: Spatial Patterns and Socio-Economic Influences", *3rd International Conference on CyberGIS and Geospatial Data Science*, Urbana IL, June 2016.
14. 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.
15. A. Sarkar, J. Pick, "A Comparison of the Information Societies of China and India", *46th Annual Meeting of the Decision Sciences Institute*, Seattle WA, November 2015.
16. A. Sarkar, "Medical Devices Manufacturing: Implications for the Coachella Valley", *ESRI International User Conference*, San Diego CA, July 2015.

17. 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.
18. A. Sarkar, J. Pick, L. Florkowski, "Correlates of ICT Adoption and Utilization in US Counties", *45th Annual Meeting of the Decision Sciences Institute*, Tampa FL, November 2014.
19. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "GIS and Spatial Analysis Across the Curriculum in Business Schools", *45th Annual Meeting of the Decision Sciences Institute*, Tampa FL, November 2014.
20. A. Sarkar, H. Ramakrishna, "Value of Spatial Decision Support in Operations Research", *INFORMS Annual Meeting*, San Francisco CA, November 2014.
21. 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.
22. F. Miller, A. Sarkar, J. Pick, "Integrating Location Analytics in Business School Curricula: Two Visions", *Esri Education GIS Conference*, San Diego CA, July 2014.
23. A. Sarkar, H. Ramakrishna, "Integrating Operations Research and GIS: Paradigms and Implications for Value Addition", *INFORMS Annual Meeting*, Minneapolis MN, October 2013.
24. A. Sarkar, H. Ramakrishna, "Business analytics in the liberal arts", *INFORMS Annual Meeting*, Minneapolis MN, October 2013.
25. 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.
26. J. Moenius, A. Sarkar, "The geographic profile of an economic crisis", *ESRI International User Conference*, San Diego CA, July 2013.
27. A. Sarkar, H. Ramakrishna, "Contributions of GIS in Vehicle Routing", *INFORMS Annual Meeting*, Phoenix AZ, November 2012.
28. 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.
29. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "Factors informing students' decision to participate in study abroad programs in business schools: An exploratory research", *42nd Annual Meeting of the Decision Sciences Institute*, Boston MA, November 2011.
30. 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 <http://www.youtube.com/watch?v=3-FYOCNtXRw&feature=BFa&list=UUCwr0VjKxPvbt9xNmKOHFFA>.
31. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "A comparison of infusion of GIS and spatial analysis concepts among AACSB and non-AACSB business schools", *41st Annual Meeting of the Decision Sciences Institute (in the Cross-Functional Interfaces track)*, San Diego CA, November 2010.
32. H. Ramakrishna, A. Sarkar, "Logistics problems: Does GIS add value in location and routing?", *40th Annual Meeting of the Decision Sciences Institute (in the Supply Chain Management track)*, New Orleans LA, November 2009.
33. H. Ramakrishna, A. Sarkar, "Vehicle Routing Problems: Does GIS Add Value?", *INFORMS Annual Meeting (in the Vehicle Routing cluster)*, San Diego CA, October 2009.
34. A. Sarkar, R. Greene, "Trade Area Analysis for a Hispanic Bridal Magazine", *Business Educators Track, ESRI Business GIS Summit*, San Diego CA, 2009.
35. A. Sarkar, S. Thosar, "Spatial Characteristics of IPO Firms", *Business Educators Track, ESRI Business GIS Summit*, San Diego CA, 2009.
36. A. Sarkar, "A Survey of GIS Applications in Operations Research", *38th Annual Meeting of the Western Decision Sciences Institute*, Kauai HI, 2009.

37. H. Ramakrishna, A. Sarkar, B. Vijayaraman, "Infusion of spatial analysis and GIS in business school curriculum: A status report", *39th Annual Meeting of the Decision Sciences Institute (in the Curriculum & Course Management track)*, Baltimore MD, November 2008.
38. A. Sarkar, "Spatial Analysis in OR/MS Curriculum", *INFORMS Annual Meeting (in the INFORM-ED cluster)*, Washington D.C., October 2008.
39. H. Ramakrishna, J. Bachani, A. Sarkar, "Business Analytics Success: A Conceptual Framework", *Academy of Management Annual Meeting*, Anaheim CA, August 2008.
40. A. Sarkar, "Spatial Analysis in Management Science and Operations Management", *ESRI Business GIS Summit*, Chicago IL, April 2008.
41. M. Kaboudan, A. Sarkar, "A GIS Framework to Forecast Residential Home Prices", *23rd Annual Meeting of the American Real Estate Society*, San Francisco CA, March 2007.
42. 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.
43. A. Sarkar, R. Batta, R. Nagi, "The Planar Area Location/Layout Problem", *13th Industrial Engineering Research Conference*, Houston TX, May 2004.
44. 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.
45. A. Sarkar, R. Batta, R. Nagi, "Placement of a Finite-sized Center Facility in the Presence of Barriers to Rectilinear Travel", *12th Industrial Engineering Research Conference*, Portland OR, May 2003.
46. 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.
47. A. Sarkar, R. Batta, R. Nagi, "Facility Location/Placement in the Presence of Congested Regions", *11th Industrial Engineering Research Conference*, Orlando FL, May 2002.

Other Academic Presentations at Professional Meetings and Conferences

1. Symposium, "GIS and Location Analytics in Systems Science Research", HICSS Annual Conference, Maui HI, 2020 (Co-presenter with T. Horan and J. Pick).
2. Workshop, "Location Analytics and Contemporary Spatial Business", HICSS Annual Conference, Maui HI, 2019 (Co-presenter with T. Horan and J. Pick).
3. 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).
4. 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).
5. 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.

Grants

Funded

1. Horan, T., Pick, J., and Sarkar, A. "Spatial Business Initiative", funded by Esri, January 2018–Present, \$600,000, Role: co-PI.
2. Sarkar, A., Moenius, J., and Spee, J. "Coachella Valley Business Incubator/Accelerator Network" co-applicant 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-PI.
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 http://business.redlands.edu/grant/BODAS_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 <http://business.redlands.edu/grant/Logistics.pdf>.

Teaching Experience

- **At University of Redlands**

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

- BUAN 640 Data Mining for Predictive Analytics; New course in MSBA program, 2019-20.
- BUAN 695 Analytics Capstone; New course in MSBA program, 2019-20.
- 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

University-wide

- *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).

School of Business

- *Co-chair*, Faculty Search Committee, Tenure-track position in Analytics, School of Business, 2019-20.
- *Co-chair*, Faculty Search Committee, Visiting faculty position in GIS, School of Business, 2019-20.
- *Co-chair*, Faculty Search Committee, Visiting faculty position in Business Analytics, School of Business, 2019-20.
- *Director of Graduate Programs*, July 2016 – June 2018.
 - *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).
 - 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)
 - 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).

Editorial/Review Activities for Journals, Conferences and Professional Societies

- Member, Editorial Board, *Journal of Global Information Technology Management* (2019-Present).
- Journals (in alphabetical order)
 - *Annals of Operations Research*, 2005 (1 paper), 2011 (1 paper).
 - *Asia-Pacific Journal of Operational Research*, 2006 (1 paper).
 - *Computers and Operations Research*, 2011 (1 paper), 2013 (1 paper).
 - *Decision Support Systems*, 2019 (1 paper)
 - *IIE Transactions*, 2010 (1 paper), 2009 (1 paper), 2006 (2 papers).
 - *Information and Management*, 2019 (1 paper)
 - *International Journal of Production Research*, 2015 (1 paper).
 - *Journal of Global Information Technology Management*, 2018 (2 papers), 2019 (3 papers).
 - *Journal of Information Systems Education*, 2013 (2 papers), 2015 (1 paper), 2017 (1 paper), 2018 (1 paper), 2019 (1 paper).
 - *Journal of Maps*, 2009 (1 paper).
 - *Papers in Applied Geography*, 2015 (1 paper), 2019 (1 paper).

- Socio-Economic Planning Sciences, 2019 (1 paper)
- Transportation Science, 2011 (1 paper), 2015 (1 paper).
- Conferences
 - Regular reviewer for Annual Meetings of HICSS, AMCIS, Decision Sciences Institute (DSI), Western Decision Sciences Institute (WDSI).
 - European Conference on Information Systems (ECIS), Barcelona, Spain, 2012 – 1 paper.
 - 2008 ESRI Business GIS Summit, Chicago, IL, 2008 (2 papers).
 - 17th IRMA International Conference, Washington, D.C., 2005 (2 papers).
 - 5th 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 2nd runner-up for Best Conference Paper Award.
- At University of Redlands
 - Recipient, Faculty Review Committee (University-wide) Award
 - For Outstanding Research, 2010.
 - For Outstanding Teaching, 2009.
 - Recipient, School of Business Excellence in Research Award, 2015, 2011.
 - Recipient, School of Business Excellence in Teaching Award, 2015, 2009.
 - Recipient, School of Business, Teaching Innovation Award, 2020.
 - Recipient, School of Business Excellence in Service Award, 2011, 2018.
 - Nominee, Faculty Review Committee (FRC) Award for Outstanding Teaching, 2007, 2008.
 - Nominee, Faculty Review Committee (FRC) Award for Outstanding Research, 2015.
 - Nominee, School of Business Excellence in Teaching Award, 2006, 2007, 2010, 2011, 2013.
- At University at Buffalo, The State University of New York
 - Recipient of Graduate Student Excellence in Teaching Award, 2003-2004, conferred by the Graduate School and the Graduate Student Association.
 - Graduate Research Assistantship (sponsored by NSF) (2000, 2001, 2003, 2004).
 - 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).