RAJENDRA SINGH, Ph.D.

University of Oklahoma http://www.ou.edu/price/mis/ Email: rsingh@ou.edu

ACADEMIC EXPERIENCE

Fall 2019 - present Associate Professor (tenure track), Management Information

Systems Division, Price College of Business, University of

Oklahoma, Norman, OK.

Fall 2016 - Spring 2019 Clinical Associate Professor, Management Science

Department, Moore School of Business, University of South

Carolina, Columbia, SC.

Fall 2012 - Spring 2016 Assistant Professor, Health Services Policy and Management,

Arnold School of Public Health, University of South Carolina,

Columbia, SC.

Fall 2011 - Summer 2012 Post-doctoral researcher, Center for Process Innovation,

Robinson College of Business, Georgia State University,

Atlanta, GA.

EDUCATION

Ph.D., <u>Computer Information Systems</u>, Center for Process Innovation, Robinson College of Business, Georgia State University, Atlanta, GA, USA (2005-2011)
 Dissertation title: Towards Information Polycentricity Theory – Investigation of a Hospital Revenue Cycle <u>Link</u>
 Dissertation committee: Prof. Lars Mathiassen (advisor), Prof. Mark Keil, Prof. Richard Baskerville, Prof. Patricia Ketsche

- 2. <u>Master of International Business</u>, Department of Commerce, Delhi School of Economics, University of Delhi, India (1995-1997)
- 3. Bachelor of Engineering (Mechanical), <u>Delhi College of Engineering</u> (now Delhi Technological University), India (1986-1990)

RESEARCH AREAS

Healthcare IT, digital health transformation, healthcare business, telehealth, IT-enabled partnerships, power in IS, institutional logics, professional burnout.

TEACHING AREAS

Healthcare IT, healthcare analytics, AI in healthcare, business intelligence, IT-enabled process innovation, enterprise systems.

ACADEMIC AWARDS

- 1. **AIS Best Information Systems Publications Award** (2019) by the Senior Scholars' Consortium of the Association for Information Systems.
- 2. **Best Paper of the Year Award** (for 2018) at *Information and Organization* journal.

- 3. **Best Paper Award** in the "IT in Healthcare" track at the Hawaii International Conference on System Sciences (HICSS), January 2016.
- 4. **Best Associate Editor for General IS Track** at *International Conference on Information Systems* (ICIS), December 2020.
- 5. **Recognition Award** by Innovation Value Institute (https://ivi.ie/) for contribution to IT Capability Maturity Framework, February 2010.

REFEREED JOURNAL PUBLICATIONS

Google Scholar https://scholar.google.com/citations?user=Nau9sQQAAAAJ

- 1. **Rajendra Singh**, Aaron Baird, and Lars Mathiassen (2020) "Ambidextrous Governance of IT-enabled Services: A Pragmatic Approach" *Information and Organization (I&O)*, (30:4) <u>Link</u>
- 2. **Rajendra Singh**, Aaron Baird, and Lars Mathiassen (2018) "Collaboration Risk Management in IT-Enabled Asymmetric Partnerships: Evidence from Telestroke Networks" *Information and Organization* (I&O), (28:4) pp. 170-191 <u>Link</u>
 - Awarded <u>AIS Best Information Systems Publications Award</u> (2019) by the Senior Scholars' Consortium of the Association for Information Systems (AIS).
 - Selected "Best Paper of the Year" (2018) in the Information and Organization journal.
- 3. **Rajendra Singh**, Vitali Mindel, and Lars Mathiassen (2017) "IT-enabled Revenue Cycle Transformation in Resource-constrained Hospitals: A Collaborative Digital Options Inquiry" *Journal of Management Information Systems (JMIS)* (34:3) pp. 695-726 <u>Link</u>
- 4. **Rajendra Singh**, Lars Mathiassen, and Abhay Mishra (2015) "Organizational Path Constitution in Technology Innovation: Evidence from Rural Telehealth" *MIS Quarterly* (MISQ) (39:3) pp. 643–665 <u>Link</u>
- 5. Jeffrey A. Switzer, **Rajendra Singh**, Lars Mathiassen, Jennifer L. Waller, Robert J. Adams, and David C. Hess (2015) "Telestroke: Variations in Intravenous Thrombolysis by Spoke Hospitals" *Journal of Stroke and Cerebrovascular Diseases* (24:4) pp. 739–744 <u>Link</u>
- 6. **Rajendra Singh**, Lars Mathiassen, Jeffrey A. Switzer, and Robert J. Adams (2014) "Assimilation of Web-Based Urgent Stroke Evaluation: A Qualitative Study of Two Networks" *JMIR Medical Informatics* (2:1 e6), pp 1–13 Link
- 7. **Rajendra Singh**, Lars Mathiassen, Max E. Stachura, and Elena V. Astapova (2011) "Dynamic Capabilities in Home Health: IT-enabled Transformation of Post-Acute Care" *Journal of the Association for Information Systems (JAIS)*, Special Issue on Healthcare IT (12:2), pp. 163–188 <u>Link</u>
- 8. **Rajendra Singh**, Lars Mathiassen, Max E. Stachura, and Elena V. Astapova (2010) "Sustainable Rural Telehealth Innovation A Public Health Case Study" *Health Services Research* (45:4), pp. 985–1004 <u>Link</u>
- 9. Rajendra Singh, Mark Keil, and Vijay Kasi (2009) "Identifying and Overcoming

the Challenges of Implementing a Project Management Office" *European Journal of Information Systems (EJIS)* (18:5), pp. 409–427 <u>Link</u>

CONFERENCE PAPERS

- 1. **Rajendra Singh**, Alexandra Durcikova, Chad Anderson, Meenakshi Singh, Patrick Ellis, "Navigating Revenue Cycle Management in the Wake of an EMR Implementation Evidence from Two Small Medical Practices" *Clinical Research Paper Development Workshop*, December 8, 2023.
- 2. Qidi (Andy) Xing and **Rajendra Singh**, "Examining the Impact of Governance Structure and Health Information Technology Enabled Capabilities on the Absorptive Capacity of U.S. Hospitals" *Academy of Management Annual Meeting (AOM), Boston, MA, August 4-8, 2023.*
- 3. **Rajendra Singh**, Chad Anderson, and Shaila Miranda, "Physician Burnout: A Technology-based Reification of Competing Logics View" *Hawaii International Conference on System Sciences (HICSS)*, January 3-8, 2022.
- 4. **Rajendra Singh**, Alexandra Durcikova, and Lars Mathiassen, "Revenue Cycle Management in the Wake of EMR Implementation: A Competing Logics Perspective" *Hawaii International Conference on System Sciences (HICSS)*, January 5-8, 2021.
- 5. Qidi Xing, Shaila Miranda, **Rajendra Singh**, "Resource Utilization Uncertainty Reduction in Hospitals: The Role of Digital Capability and Governance Structure" *International Conference on Information Systems (ICIS)*, Dec 13-16, 2020.
- 6. Sriram Venkataraman, **Rajendra Singh**, "Impact of Focus on Efficiency and Financial Performance in Hospitals: Moderating Effect of Information Technology" *Decision Science Institute Annual Conference (DSI)*, Nov 20-23, 2020.
- 7. Qidi Xing, **Rajendra Singh**, Shaila Miranda, "Hospital's External Digital Capability: The Effect of Internal Digital Capability and Multi-hospital System Governance Structure" *Conference on Health IT & Analytics*, Oct 8-10, 2020.
- 8. **Rajendra Singh**, Vitali Mindel, and Lars Mathiassen, "IT-based Revenue Cycle Management An Action Research into Relational Coordination" *Hawaii International Conference on System Sciences (HICSS)*, January 5-8, 2016.
 - Received **Best Paper Award** in the "IT in Healthcare" track.
- 9. Jumee Wang, **Rajendra Singh**, Janice Probst, "Exploring the association between socio-demographic factors and patient engagement among US adults using the Health Information National Trends Data" *AcademyHealth Annual Conference*, Minneapolis, MN, June 14-16, 2015.
- 10. **Rajendra Singh**, Lars Mathiassen and Abhay Mishra "A Theory of Rural Telehealth Innovation A Paradoxical Approach" *International Conference on Information Systems (ICIS)*, Phoenix, AZ, USA, December 15-18, 2009.
- 11. Max Stachura, Elena Astapova, **Rajendra Singh**, and Lars Mathiassen "Networking the Emergency Departments of Collaborating Rural Hospitals" Fourteenth Annual International Meeting and Exposition of the American Telemedicine Association, Las Vegas, NV, USA, April 2009.
- 12. Rajendra Singh, Lars Mathiassen, Max Stachura, and Elena Khasanshina

- "Sustainable Rural Telehealth Innovation A Public Health Case Study" *Institute* for Operations Research and the Management Sciences Annual Meeting (INFORMS), Washington, DC, USA, October 12-15, 2008.
- 13. Max Stachura, Lars Mathiassen, Elena Khasanshina, and **Rajendra Singh** "Community-driven sustainable telemedicine and telehealth innovation" *Thirteenth Annual International Meeting and Exposition of the American Telemedicine Association*, Seattle, WA, April 6-8, 2008.
- 14. **Rajendra Singh** and Lars Mathiassen "IT Enabled Service Innovation in Rural Health: A Community-Driven Approach" *Positive Design Conference: Workshop on Technology, Design and Management*, Monterrey, Mexico, April 3-5, 2008
- 15. **Rajendra Singh**, Mark Keil, and Vijay Kasi "The Challenges in Implementing a Project Management Office: A Delphi Study" *Academy of Management Annual Meeting (AOM)*, Philadelphia, PA, August 3-8, 2007.

INVITED PRESENTATIONS

- 1. **Rajendra Singh** "*Telestroke A Research Journey*" (Presented at MIS Research Seminar at Worcester Polytechnic Institute Oct 2024).
- 2. **Rajendra Singh** "An Account of Engaged Scholarship Collaboration Risk Management in Telestroke Networks" (Presented at MIS Department Research Seminar at University of Georgia, Athens Nov 2018).
- 3. **Rajendra Singh** and Elizabeth Regan "*Optimization: Making Innovation the New Normal*" (Presented at a conference organized by the South Carolina chapter of Healthcare Information and Management Systems Society (HIMSS), Columbia Oct 2015).
- 4. **Rajendra Singh**, Aaron Baird, and Lars Mathiassen "*Absorptive Capacity in Cocreation of IT Value: Evidence from Two Telestroke Networks*" (Presented at Theory Workshop on Innovation, Technology & Management, conducted by the Center for Process Innovation at Georgia State University, Atlanta May 2013).

RESEARCH GRANT REPORTS

1. **Rajendra Singh**, Lars Mathiassen, Jeffrey Switzer, and Robert Adams "*Explaining Variations in Telestroke Assimilation across Hospitals*" (Funded by Genentech, Report submitted in Oct 2012).

RESEARCH FUNDING

- Research support \$15,000 (2014-2015) [Co-investigator]
 Collaboration with Prof. Karen Minyard (Georgia State University) to investigate technical assistance to rural health systems in Georgia.
- 2. Genentech Inc. grant \$145,000 (2011-2012) [Co-investigator and Project Manager] Collaboration with Prof. Lars Mathiassen (Georgia State University), Dr. Jeffrey Switzer, MD (Augusta University), and Dr. Robert Adams, MD (Medical University of South Carolina) to investigate the assimilation of telehealth in stroke management in rural hospitals in Georgia and South Carolina.

3. Georgia Research Alliance grant – \$94,000 (2007-2009) [Co-investigator and Project Manager]

Collaboration with Prof. Lars Mathiassen (Georgia State University) and Dr. Max Stachura, MD (Augusta University) to investigate telehealth innovation in Georgia.

SERVICE

Institutional - University of Oklahoma

- Faculty search committee, MIS Division, Price College of Business Member (2021, 2022, 2024)
- *MIS research seminar series*, MIS Division, Price College of Business Co-chair (2024, 2025)
- Admissions committee, Master of Information Technology (MIT) Member (2024)
- Course equivalence coordinator, MIS Division, Price College of Business (2022, 2023, 2024)
- Honors program coordinator, MIS Division, Price College of Business (2022, 2023, 2024)
- Healthcare steering committee, Price College of Business Member (2020, 2021, 2022)
- Facilities committee, Price College of Business Member (2020, 2021, 2022)

Institutional - University of South Carolina

Faculty search committee

- Member Management Science Department, Darla Moore School of Business (2016, 2018)
- Chair Health Services Policy and Management Department, Arnold School of Public Health (2013)
- Member Health Services Policy and Management Department, Arnold School of Public Health (2012, 2014)
- Member Integrated Information Technology Department, School of Hospitality, Retail, and Sports Management (2013)

Curriculum committee

- Member Master of Health Administration program (2014 2016)
- Member Master of Health IT program (2014 2016)

Admissions committee

• Member - Master of Health Administration (MHA) (2013 - 2016)

Academic Community

Journal paper reviewer (Ad hoc)

- MIS Quarterly; Journal of Management Information Systems; Information Systems Research; Journal of the Association for Information Systems; European Journal of Information Systems; Information Systems Journal; Information and Organization; AIS Transactions on Replication Research
- Production and Operations Management; Journal of Operations Management;

Decision Sciences Journal; Management Science

Health Systems

Conference paper reviewer

- International Conference on Information Systems (ICIS)
- Americas Conference on Information Systems (AMCIS)
- Hawaii International Conference on System Sciences (HICSS)
- Academy of Management Conference (AOM)

Conference review coordinator

• International Conference on Information Systems – 2021

Conference Associate Editor

- International Conference on Information Systems 2020 (General IS track)
 - Received **Best Associate Editor Award** for General IS Track

Conference Session Chair

- International Conference on Information Systems 2023 (Social impact of IS)
- International Conference on Information Systems 2020 (Health IS Track, Mobile & Social Health session)

TEACHING

University of Oklahoma

- 1. <u>Healthcare Analytics</u> (MIT 5822) for Online MS in Business Analytics students [spring 2023, spring 2024, spring 2025]
- 2. <u>Managing ERP Systems</u> (MIT 5692) for MBA students [spring 2020, spring 2021, spring 2022, spring 2023, spring 2024, spring 2025]
- 3. <u>Health Informatics & Data Analytics at Price Executive Academy</u> for senior executives at OU Health [fall 2024]
- 4. <u>Health Information Technologies</u> (MIT 5822) for MBA students [fall 2019, fall 2021, fall 2022, fall 2023, fall 2024]
- 5. <u>Electronic Business Processes</u> (MIS 3383) for undergraduate students [spring 2020, fall 2020, spring 2022, fall 2024]
- 6. <u>Field Project</u> (MIS 4663) Organized and supervised 5 field projects for undergraduate students [spring 2021]

University of South Carolina

Darla Moore School of Business (2016-2019)

- 1. Optimization, Simulation, and Data visualization for US Army Executive Education Program [spring 2019]
- 2. Advanced Quantitative Techniques and Data Visualization (MGSC 777) for MBA students [spring 2019]
- 3. <u>Data Analytics for Business</u> (MGSC 394) for undergraduate students [spring 2018, fall 2018, spring 2019]
- 4. Operations Management (MGSC 395) for undergraduate students [spring 2017, fall 2017]

5. <u>Information Systems for Business</u> (MGSC 290) for undergraduate students [fall 2016 (online), spring 2017 (hybrid), fall 2017 (hybrid)]

Arnold School of Public Health (2012-2016)

- 6. <u>Healthcare Operations Management</u> (HSPM 768) for Master of Health Administration students [summer 2013, fall 2014, fall 2015, spring 2016 (online)]
- 7. <u>Information Systems in Healthcare</u> (HSPM 713) for Master of Health Administration students [fall 2012, fall 2013, spring 2014 (online), summer 2014, summer 2015, summer 2016]
- 8. <u>Master's Practicum</u> Supervised 3-4 practicum (capstone) projects per semester at local healthcare organizations for Master of Health Administration and Master of Public Health students (2013-2016)

Georgia State University

- 1. Managing IT Projects (CIS 3001) for undergraduate students [spring 2012 (online)]
- 2. <u>Introduction to Computer Information Systems</u> (CIS 2010) for undergraduate students [spring 2007, fall 2008, fall 2011]

DOCTORAL DISSERTATION COMMITTEE

University of Oklahoma

- Qidi (Andy) Xing "Digital Organizations and Organizing Digitally: Discursive Sensemaking of Digital Transformation on Social Media" – defended in June 2024 [Member]
- 2. Sun-Young (Sunny) Whang "Identity and Institutional Work in the Digital Era: The Metaverse" defended in July 2023 [*Member*]
- 3. Pascal Nitiema "Toward A Framework for Alleviating Technostress: The Role of Affect State" defended in June 2022 [*Member*]

University of South Carolina

- 1. Jumee Wang "Examining the Relationship among Patient Centered Provider Communication, Patient Engagement, and Patient Care Experience in the General US Adult Population" defended in June 2016 [Chair]
- 2. Ashley Barnes "Relationship between Job Satisfaction among Frontline Staff and Patient Satisfaction: Evidence from Community Health Centers in South Carolina" defended in November 2015 [*Chair*]
- 3. George Raul Audi "Impact of Multi-Hospital System Organizational Structure on Financial Performance and Quality of Care in Rural America" defended in August 2014 [Chair]

HONORS PROJECT SUPERVISION

University of Oklahoma

- 1. Isabella Miller "Artificial Intelligence in Healthcare and Creation of a Graduate-Level Course Content" – completed in March 2024 [Supervisor]
- 2. Sumayah Sandhu "Information Technology Risks at the University of Oklahoma: A Case Study" completed in August 2022 [Supervisor]
- 3. Marian Sorrels "An Investigation into the Use of Information Technology in the

- Home Health Care Industry: Case Study of Mercy Home Health" completed in December 2021 [Supervisor]
- 4. Saba Sandhu "Revenue Cycle in a Cardiology Clinic: Examination and Proposed Process Improvements" completed in August 2021 [Supervisor]

BUSINESS EXPERIENCE

Year	Role
2014-2020	Technology and process advisor, AparHealth (South Carolina) ¹
2004-2004	Quality assurance manager (consultant) for software development projects for data resource management group, Countrywide Finance (California)
2002-2003	Quality assurance manager (consultant) for software development projects for gas turbine solutions group, GE Power Systems (Georgia)
2001-2002	Quality assurance lead for software development projects related to supply chain visualization, SupplySolution Inc. (California)
2000-2001	Quality assurance analyst (consultant) for software development projects for e-commerce solutions, Barnes&Noble.com (New York)
1998-1999	Project manager (consultant) for the implementation of Navision ERP (now part of Microsoft Dynamics), Respironics Deutschland (Germany)
1998-1998	Business process analyst (SAP R/3 – Production Planning and Material Management modules), Pegasus Systems (India)
1991-1997	Engineer & executive engineer for oil and gas production operations, Oil and Natural Gas Corporation (India)
1990-1991	Sales engineer trainee, Ingersoll-Rand (India)
1990-1990	Graduate engineer trainee, Titan Watches (India)

Page 8 of 8

¹ I helped my wife, a physician, set up an independent medical practice and provided ongoing technology and operational support. I draw on this experience to provide context and practical insights to students in my healthcare IT related classes at the University of South Carolina (until 2019) and the University of Oklahoma (2019-present).