Raj Sharman
Professor

Office

Department of Management Science & Systems
School of Management,
SUNY, Buffalo, New York 14260
Ph: (716) 645-2081; Fax: (716) 645-6117
E-Mail: rsharman@buffalo.edu

Residence

136 Tennyson Terrace
Williamsville, NY 14221
Ph: (716) 632-0502

Education

Ph.D. in Computer Science (August 1998)
Louisiana State University, Baton Rouge, Louisiana 70802

Master of Science in Industrial Engineering (May 1987)
Louisiana State University, Baton Rouge, Louisiana 70802

Master of Science in Industrial Management (June 1983)
Indian Institute of Technology, Bombay, India

Bachelor of Science in Metallurgical Engineering (June 1980)
Indian Institute of Technology, Bombay, India

Research

Journal Papers (Published / Accepted)

Agarwal, L, Mulgund P, Sharman, R, "New Technologies and New Regulations in Financial Services – PSD and Blockchain", Cutter IT Journal, Volume 21(1), Forthcoming

Valecha, R., Rao, H. R., and Upadhaya, S., Sharman, R., "An Activity Theory Approach to Modeling Dispatch-Mediated Emergency Response", Journal of the Association for Information Systems (JAIS), Issue 20, Volume 1, 33-5, 2019.

Kazumori E, Fang F, Sharman R, Takeda F, Yu H. Asset Pricing with Liquidity Risk: A Replication and Out-of-Sample Tests with the Recent US and the Japanese Market Data. Critical Finance Review (CFR), Volume 8(1-2): pp 73-110, Oct 31, 2019.

Mahesh, A., Suresh, N., Gupta, M. and Sharman, R. (2018). "Cloud Risk Resilience: Investigation of Audit Practices and Technology Advances- A Technical Report", International Journal of Risk and Contingency Management (IJRCM), Volume 8, Issue 2. Forthcoming.

Ivanov, A. and Sharman, R., "The Impact of User-Generated Internet Content on Hospital Reputational Dynamics" Journal of Management Information Systems (JMIS), Accepted, September 2018.

Subramanian, A., Gupta, M. and Sharman, R., "Auditing an Agile Development Operations Ecosystem", The International Journal of Risk and Contingency Management (IJRCM), Volume 7, Issue 4, 2018.

Lin, W., Kao, T. W., Chou, C. C., Sharman, R., Simpson, N. C., "The complementarity and substitutability relationships between information technology and benefits and duration of unemployment", Decision Support Systems, Volume 90, 2016 Oct 31, pp.12-22.

Ada, S., Han, W. Sharman, R., Brennan, J., "Users' Preference for Emergency Notification Services in Campus Emergencies: An Empirical Investigation", The IEEE Transactions on Professional Communication, Volume 18 Number 1, June 2016, pp. 85-106.

Han, W., Sharman, R., Ada, S., Rao, H. R., "Campus Emergency Notification Systems: An Examination of Factors Affecting Compliance with Alerts", *Management Information Systems Quarterly (MISQ)*, Volume 39, Number 4, December 2015, pp. 909-929.

Park, I., Sharman, R., and Rao, H. R.,"Perceived Information Assurance, Risk, Resilience, and Information Systems Effectiveness in the context of Disasters", *Management Information Systems Quarterly (MISQ)*, Volume 39, Number 2, June 2015, pp. 317-344

Yaraghi, N., Ye, D., Sharman, R., Gopal, R., Ramesh, R., Singh, R., "Drivers of Information Disclosure on Health Information Exchange Platforms: Insights from an Exploratory Empirical Study", *Journal of the American Medical Informatics Association (JAMIA)*, May 26, 2015.

Ivanov, A., Sharman, R. and Rao, H. R., "Exploring Factors Impacting Sharing Health-Tracking Records", *Health Policy and Technology, Voluem* 4, no. 3 (2015): 263-276. (Sept. 2015).

Han, W., Sharman, R., Heider, A., Maloney, N., Yang, M., Singh, R., "Impact of Electronic Diabetes Registry 'Meaningful Use' on Quality of care and Hospital Utilization*", Journal of the American Medical Informatics Association (JAMIA)*, print version - September, 2015.

Yaraghi, N., Ye, D., Sharman, R., Gopal, R., Ramesh, R., "Health Information Exchange as a Multi-sided Platform: Adoption, Usage and Practice Involvement in Service Co-Production", *Information Systems Research (ISR),* November 18, 2014.

Han, W., Ada, S., Sharman, R., Gray, R. "Factors Impacting the Adoption of Social Network Sites for Emergency Notification Purposes in Universities*", International Journal of Business information Systems*, November 2014

Xiao, N., Sharman, R., Rao, H. R., & Upadhyaya, S., "Factors influencing online health information search: An empirical analysis of a national cancer-related survey*", Decision Support ystems (DSS)*, 57, 2014, pp. 417-427.

Yaraghi, N., Ye, D., Sharman, R., Gopal, R., Ramesh, R., Singh, R., Singh, G., "Professional and Geographical Network Effects on Healthcare Information Exchange Growth: Does Proximity Really Matter*?", Journal of the American Medical Informatics Association (JAMIA)*, November 29, 2013,pp. 671-678.

Yaraghi, N., Ye, D., Sharman, R., Gopal, R., Ramesh, R., "Network Effects in Health Information Exchange Growth", *ACM Transactions on Management Information Systems (ACM TMIS)*, Volume 4, No. 1, April 2013.

Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S., "An Investigation of Messaging for Emergency Response Systems", *ACM Transactions on Management Information Systems (ACM TMIS)*, Volumer 4, No. 1, April 2013.

Chen, R., Sharman, R., Rao, H. R., "Data Model Development for Fire Related Extreme Events", *Management Information Systems Quarterly (MISQ),* March 2013,pp. 125-147.

Xiao, N, Sharman, R., Rao, H. R., and Dutta, S., "A Simulation-based Study for Managing Hospital Emergency Department's Capacity in Extreme Events", *International Journal of Business Excellence (IJBEX)*, Vol. 5(1/2), December 2012, pp. 140-154

Xiao, N, Sharman, R., Singh, R., Singh, G., Rao, H. R., ""Meaningful Use" of Ambulatory EMR: Does It Improve The Quality and Efficiency of Health Care*?", Health Policy and Technology,* Volume 1, Issue 1, March 2012, pp. 28-34.

Ada, S., Sharman, R., & Balkundi, P., "Impact of meta-analytic decisions on the conclusions drawn on the business value of information technology", *Decision Support Systems (DSS)*, Volume 54 , Issue 1, 2012, pp. 521-533.

Amo, L. C., Ada, S., Sharman, R., "The Role of Scholar Status in the Academic Publication Process", *International Journal of Doctoral Studies*, Volume 7, 2012, pp. 79-92

Gupta, M and Sharman, R., "Determinants of Data Breaches: A Categorization Based on Empirical Investigation", *Journal of Applied Security Research*, Volume 7, Issue 3, 2012, pp. 375-395

Singh, R., Sharman, R., Singh, A., Brooks, R., McLean, D., Singh, R., "Innovative Web-based Tool for Safer Transitions of Patients Through Healthcare Systems", *Advances in Computer Science and Information Engineering*, Volume 125, 2012, pp. 187-194.

Gupta, M., and Sharman, R., "Incorporating Social-Cultural Contexts in Role Engineering: An Activity Theoretic Approach" , *International Journal of Business Information Systems*, Volume 7, Number 1, 2011, pp. 60-77.

Chen, R., Rao, H. R., Sharman, R., Upadhyaya, S., and Kim, J., "An Empirical Examination of IT-Enabled Emergency Response: The Cases of Hurricane Katrina and Hurricane Rita", *Communications of the Association for Information Systems (CAIS),* Volume 26, Article 8,2010, pp. 141-156.

Gupta, M., and Sharman, R., "Activity Governance for Managing Risks in Role Design for SSO Systems*", Journal of Information Assurance and Security*, Volume 5, Issue 6, November 2010, Dynamic Publishers.

Kim, M., Sharman, R., Rao, H. R., Upadhyaya, S., and Cook-Cottone. C. P., "Assessing roles of people, technology and structure in emergency management systems: A public sector perspective", *Behavior & Information Technology*, December 14, 2010.

Gupta, M. and Sharman, R. "Impact of Web Portal Announcements on Market Valuations: An Event Study", *International Journal of Web Portals*, Volume 2, Issue 4, 2010, pp. 1-17.

Wang, J., Sharman, R., and Zionts, S., "Functionality defense through diversity: a design framework to multitier systems," *Annals of Operations Research*, March 2010.

Ryu, C., Sharman, R., Rao, H. R., and Upadhyaya, S., "Security Protection Design for Deception and Real System Regimes: A Model and Analysis", *European Journal of Operational Research*, Volume 201,Issue 2,March 2010, pp. 545-556.

Gupta, M., and Sharman, R., "Secure Role Engineering design using Activity theoretic approach", *International Journal of Business Information Systems*, Accepted in May 2009.

Tallau, L., Sharman, R. and Gupta, M., "Investment Decisions: Evaluating Balance Scorecard Method", *International Journal of Business Information Systems*, Issue 6, No. 4, 2009.

Gupta, M., Bryan, D. and Sharman, R., "Enabling Business and Security through Technology Implementation: A Financial Services Case Study", *Journal of Applied Security Research*, Taylor and Francis Group, 1936-1629, Volume 4, Issue 3, 2009, pp. 322-340.

Chen, R., Sharman, R., Chakravarti, N., Rao, H. R., and Upadhyaya, S., "Emergency Response Information System Interoperability: Development of Chemical Incident Response Data Model," *Journal of the Association of Information Systems (JAIS),* Volume 9, No. 3, Article 7, 2008.

Gupta, M., and Sharman, R., "Dimensions of Identity Federation: A Case Study in Financial Services*", Journal of Information Assurance and Security*, Volume 3, Issue 4, December 2008, pp. 244-256.

Sharman, R., Kim, J. K., Rao, H. R., and Upadhyaya, S., "Lessons Learned from Katrina and Rita Hurricane Disasters: Results of a Delphi Study*", Journal of Information Science and Technology*, Volume 5, No. 1, 2008.

Wang, J., Sharman, R., and Ramesh, R., "Content Management in Replicated Web Systems: A Feedback Learning Design Framework using Problem Decomposition and Controlled Simulation and Feedback Learning*", IEEE Transactions on Systems, Man, and Cybernetics*, Volume 38, No. 1,2008, pp. 110-124.

Chen, R., Sharman, R., Rao, H. R., and Upadhyaya, S., "An Exploration of Coordination in Emergency Response Management*", Communications of the ACM (CACM)*, Volume 51 , No. 5, 2008, pp. 66-73.

Cody, E., Sharman, R., Rao, H. R., and Upadhyaya, S., "Security in Grid Computing: A Review and Synthesis," Decision Support Systems, Volume 44 , No. 4, 2008, pp. 749-764.

Kim, J. K., Sharman, R., Rao, H. R., and Upadhyaya, S., "Efficiency of Critical Incident Management Systems: Instrument Development and Validation," *Decision Support Systems*, Volume 44, No. 1, 2007,pp. 235-250.

Ghosh, D., Sharman, R., Rao, H. R., and Upadhyaya, S., "An Investigation of Self-Healing Systems" , *Decision Support Systems*, Volume 42, No. 4, 2007, pp. 2164-2185.

Sharman, R., Ramanna, S.S., Ramesh, R., and Gopal, D. R., "Cache Architecture for On-Demand Remote Streaming on the Web", *ACM Transactions on the Web*, Volume 44, No. 1,2007, pp. 23-49.

Zhang, H., Kishore, R., Sharman, R., and Ramesh, R., "Agile Integration Modeling Language (AIML): A Conceptual Modeling Grammar for Agile Integrative Business Information Systems", *Decision Support Systems*, Volume 44, No. 1, 2007, pp. 266-284,.

Park, I., Sharman, R., Rao, H. R., and Upadhyaya, S., "Short Term and Total Life Impact analysis of email worms in computer systems*", Decision Support Systems*, Volume 43, No. 3, 2007, pp. 827-841.

Chen, R., Sharman, R., Rao, H. R., and Upadhyaya, S., "Design Principles for Emergency Response Systems*", Information Systems and e-Business Management*, Volume 5, No. 3, 2007, pp. 201-227.

Park, I., Sharman, R., Rao, H. R., and Upadhyaya, S., "The Effect of Spam and Privacy Concerns on Email Users' Behavior*", Journal of Information System Security*, Volume 3, No. 1,2007, pp. 39-63.

Lee, J. K., Upadhyaya, S., Rao, H., R., and Sharman, R., "Secure Knowledge Management and the Semantic Web*", Communications of the ACM (CACM)*, Volume 48, No.12,2005, pp. 48-54.

Kishore, R., Sharman, R., and Ramesh, R., "Computational Ontologies and Information Systems: I. Foundations*", Communications of the Association for Information Systems*, Volume. 14, No.8, 2004, pp. 158-183.

Sharman, R., Kishore, R., and Ramesh, R., "Computational Ontologies and Information Systems: II. Formal Specification*", Communications of the Association for Information Systems*, Volume 14, No. 9, 2004, pp. 184-205.

Sharman, R., Tyler, J. M., and Oleg, P., "A Fast and Accurate Method to Register Medical Images using Wavelet Modulus Maxima*", Pattern Recognition Letters*, Volume 21, No. 6-7,2000, pp. 447-462.

Pianykh, O.S., Tyler, J.M., and Sharman, R., "Nearly-Lossless Autoregressive Image Compression", Pattern Recognition Letters, Vol. 20, No. 2,1999, pp. 221-228.

Sharman R, and Sayed, O., "Job Characteristics in relation to organizational effectiveness in two organizations", Indian Journal of Industrial Relations, v19, #1, 1983.

Journal Special Issue

Guest Editors: Santanam, R., Rao, H. R. and Sharman, R, "Grand Challenges in E-Business", Information Systems and e-Business Management, Springer-Verlag Publications, 2011.

Journal Papers (Under Review)

Mulgund, P., Sharman, R., Shekar, S., Anand, P., Karadi, P., "Data Quality Issues in Physician Rating Websites: Systematic Review", Journal of Medical Internet Research (JMIR), Expecting acceptance by October 2020.

Ndabu, T., Mulgund, P., Sharman, R., and Winklestein, P., "How differently do clinicians and Technologists see things – The issue of health information technology related-related errors in hospitals", Journal of Medical Internet Research (JMIR), Expecting acceptance by October 2020.

Venkatesan, S., Han W., Smith, S., and Sharman, R., Seeking Advice from Similar Patients: The Role of Cohesive Subgroups and Discourse Dynamics toward Quality of Response", Revise and Resubmit, Information Systems Research, March 2018.

Journal Papers (Work in Progress)

Ivanov, A., Bezawada, R., Sharman, R. "Exploring the impact of online ratings on healthcare providers' business value in a competitive environment: a moderator study." (Ready for submission)

Ivanov, A., Sharman, R. "Is there a relationship between psychological language used on Twitter and county-level cancer incidences rates?" (preparing submission to Journal of the American Medical Informatics Association.)

Abdelhamid, M, Sharman, R., and Bezawada, R., "Better Patient Privacy Protection with better patient empowerment about Consent with Health Information Exchanges", Targetted for Production and Operations Management Journal (POMS).

Abdelhamid, M, Sharman, R., and Han, W., "Impact of Message Framing on Compliance with messages sent via Emergency Notification Systems: Application for extreme events", Journal of Management Information Systems (JMIS). Aug

Howell, P, Sharman, R., and Abdelhamid, M., "Smart Card Adoption in Healthcare:An experimental Study Design using Message Framing", Journal of Management Information Systems (JMIS).

Venkatesan, S., Sharman, R., Bezawada, R., 'Calibrating response quality in patient to patient Parkinson disease portals using Bayesian Approach', to be submitted to *Information Systems Research (ISR)*.

Ivanov, A., Sharman, R. and Bezawada, R., "The Impact of Online Ratings and Reviews on Healthcare Provider Business Value, ", to be submitted to *Information Systems Research (ISR)*.

Ada, S., Sharman, R., Balkundi, P. and Kohli, R., "Unpacking the Inflections in IT-Payoff Relationships: A Meta-Analysis of Three Decades of Research", being revised to resubmit to *Management Information Systsems Quarterly (MISQ)*.

Kisekka, V., Sharman, R., Singh, R., Singh, G., "Activity Lifecycle of Patients on Online Healthcare Social Networks – A Review of Research Findings", Targetted for *Journal of the Medical Informatics Association (JAMIA)*.

Ada, S., Sharman, R., Balkundi, P., "Business value of information technology: a cross-cultural perspective", *European Journal of Information Systems (EJIS)*.

Venkatesan, S., and Sharman, R. , "Measuring Commerce Website Performance: A decade in Review", Targetted for *Decision Support Systems (DSS)*.

Monterio, J., and Sharman, R., "Data Model for a Victim Management System for an Active Shooter Incident", Targetted for *Management Information Systems Quarterly (MISQ)*.

Sharman, R., and Gupta, M., "Distributed Denial of Service: Past, Present and the Future", Targetted for *IEEE Transactions on Systems, Man and Cybernetics*, Part – C.

Books

Gupta, M. Sharman, R., Walp, J., and Mulgund, P., "Information Technology Risk Management and Compliance in Modern Organizations (Advances in Information Security, Privacy, and Ethics)", IGI Global Inc., Hershey, Pennsylvania, USA, January, 2018.

Gupta, M., Walp, J., and Sharman, R., "Strategic and Practical Approaches for Information Security Governance: Technologies and Applied Solutions", IGI Global Inc., Hershey, Pennsylvania, USA, February 29, 2012.

Gupta, M., Walp, J., and Sharman, R., "Threats, Countermeasures and Advances in Applied Information Security", IGI Global Inc., Hershey, Pennsylvania, USA, April 30, 2012.

Sharman, R. Das-Smith, S. and Gupta, M. (Eds), "Digital Identity and Access Management: Technologies and Frameworks", IGI Global Inc., Hershey, Pennsylvania, USA, December 31, 2012.

Sharman, R., Rao H. R. and Santanam, R., "Exploring the grand challenges for next generation e-business", Proceedings of the Workshop on E-Business, Springer-Verlag Publications, Edited Book, December 2010. Published March 21, 2011.

Gupta, M., and Sharman, R. (Eds), "Handbook of Research on Social and Organizational Liabilities in Information Security," Idea Group Publishing Inc., Hershey, Pennsylvania, USA, 2008., ISBN: 978-1-60566-132-2, Nov. 20, 2009.

Gupta, M., and Sharman, R. (Eds), "Social and Human Elements of Information Security: Emerging Trends and Countermeasures," Idea Group Publishing Inc., Hershey, Pennsylvania, USA, 2008. ISBN: 978-1-60566-036-3 hardcover; 978-1-60566-037-0 soft-cover, September 10, 2008.

Sharman, R., Kishore, R., and Ramesh, R., (Eds.) "Ontologies – A Handbook of Principles, Concepts and Applications in Information Systems", Springer, Boston, MA, 2007.

Book Chapters

Abdelhamid, M., Venkatesan, S., Gaia, J., and Sharman, R., "Do Privacy Concerns Affect Information Seeking via Smartphones?", " in Information Technology Risk Management and Compliance in Modern Organizations (Advances in Information Security, Privacy, and Ethics). Eds: M. Gupta, R. Sharman, J. Walp, and P. Mulgund, Idea Group Publishing, Hershey, PA, USA, ISBN: 978-1-52252-604-9, 2018.

Chen R., Sharman, R., Rao, H. R., Upadhyaya, S., Cook-Cottone, S., "Coordination of Emergency Response: An Examination of the Roles of People, Process, and Information Technology", in: M. Turoff, R. Hiltz, B. Van de Walle (Eds.), Information Systems for Emergency Management, M.E. Sharpe, September 2009.

Serkan A., Sharman, R. and Gupta, M. "Theories Used in Information Security Research: Survey and Agenda". Handbook of Research on Social and Organizational Liabilities in Information Security. (pp 279-292) Eds: Manish Gupta and Raj Sharman, IGI Publishing, Hershey, PA, USA. Forthcoming. (ISBN: 978-1-60566-132-5), March 2009.

Gupta, M. and Sharman, R., "Security-Efficient Identity Management Using Service Provisioning (Markup Language)", in Handbook of Research on Information Security and Assurance. Eds: Jatinder N.D. Gupta And Sushil Sharma, Idea Group Publishing, Hershey, PA, April, USA, ISBN: 978-1-59904-855-0, 2008.

Gupta, M. and Sharman, R., "Emerging Frameworks in User-focused Identity Management," in Handbook of Research on Enterprise Systems. Eds: Jantinder N. D. Gupta, S. K. Sharma and M. A. Rashid, Idea Group Publishing, Hershey, PA., (ISBN- 978-1-59904-859-8). September 2008.

Gupta, M., Sharman, R., and Sanders, L., "Security Requirements Elicitation: An Agenda for Acquisition of Human Factors" in Human and Social Elements of Information Security: Emerging Trends and Countermeasures. Eds: M. Gupta and R. Sharman, Idea Group Publishing, Hershey, PA, USA, ISBN: 978-1-60566-036-3, 2008.

Gupta, M. and Sharman, R., "Pharming Attack Designs. Encyclopedia of Information Ethics and Security", Editor: Dr Marian Quigley, Idea Group Publishing, ISBN-10: 159140987, 2007.

Sharman, R., Kakanath, P., Rao, H. R., and Upadhaya, S., "Anti-virus Deployment Strategy for Enterprise Security," in "Enterprise Information Systems Assurance and System Security: Managerial and Technical Issues," Editors: Merrill Warkentin and Ray Vaughn, Idea Group Publishing, ISBN 159140912-8, 2006.

Honors and Awards

Best Research Paper Award , Venkatesan, S. and Sharman, R., "Impact of Network Configuration on Welfare of Parkinson's Disease Patients in Online Social Networks", 2nd International Conference on Big Data and Analytics for Business, New Delhi, India, March 17-18, 2016.

Best Paper (Third), Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S., "Messaging Model for Emergency Communication" Proceedings of the Mid-West Association for Information Systems (MWAIS 2012), Green Bay, Wisconsin, May 17-18, 2012.

Nominated for Best Paper Award, Yaraghi, N., Du, Y., Sharman, R., Gopal, R., Ramesh, R., "Interlinked Network Effects in Healthcare Information Exchange Growth", Interlinked Network Effects in Healthcare Information Exchange Growth, Workshop on Information Technology and Systems (WITS 2011), Shanghai, China, December, 2011. [Also awarded best paper in the School of Management Poster Competition]

Best Paper Award, Gupta, M., Sharman, R., and Rao, H. R., "Framing Effects of Crisis Response Communications on Market Valuation of Breached Firms", Annual Symposium on Information Security, Albany New York, June , 2011.

Best Prototype Award, Valecha, R., Sharman, R., Monteiro, J , R, Rao, H. R., Upadhaya, S., Keerthana, S., Patel, M, Singh, A., Sharma, K.,'A Prototype of a FIRE-RELATED EXTREME EVENTZ SYSTEM (FREEZ)', Workshop on Information Technology and Systems (WITS), St. Louis, Dec. 2010.

Best Paper Award, Paper title "Content-Sensitive, temporally Adaptive Metadata" with Brendan Gilbert, Manish Gupta,H. R. Rao, Shambu Updhayaya and Kenneth P. Mortensen, Esq., 3rd Annual Symposium on Information Assurance (11th Annual New York State Cyber Security Conference), Albany, NY, June 4-5 2008.

Best Paper Award, Paper title "A Design Framework to Information System Functionality Defense through Diversity" with Jingguo Wang and Stanley Zionts, Americas Conference on Information Systems (AMCIS), 2006.

Freeman Faculty Fellow Award, Tulane University, Freeman School of Business, 2000-2001.

Seinsheimer Faculty Fellow Award, Tulane University, Freeman School of Business, 1999-2000.

Deans commendation for excellence in Teaching, LSU, College of Basic Sciences, 1998.

Outstanding Employee Service Award - Outstanding contribution to the School of Veterinary Medicine, LSU for the year 1994.

Received "Shri P. B. Deshpande Award" for the best performance in Physics in the College (Ruparel College, Bombay, India at the First Year Science level).

Grants

- Co-Director, **Office of the National Coordinator for Health Information Technology BEACON** Award no. 90BC0003/01. Western New York Clinical Information Exchange (Awardee). Subcontract Award: Health Information Technology Internship Program. 5/2011-3/2013. Co-Directors: Ranjit Singh, Raj Sharman, $135,000
- Co-PI, **NSF Grant**. The October 2006 Federal Disaster in Buffalo, NY: An Investigation of First and Second Responder Operations, SGER, $29,995.
- Co-PI, **UB2020 IRDF Grant**. "Analyzing Emergency Response Management Systems in the Context of the Katrina and Rita Disasters-A First Responder Focus," $22,500.
- **NSF Grant**. $8000, 2004-2005, Senior Personnel, (PI's H. Raghav Rao and Shambhu Upadhyaya).
- Co-PI, **Air Force Research Laboratory (AFRL)** Grant. $5000, April 2004 – March 2005.
- PI, **Ed. Tech Grant**, HIPAA Compliant Medical Data Repository. $8,000, UB EdTech, August 2004 – May 2005.
- PI, State University of New York at Buffalo, School of Management, **Summer Research Award** of $ 63,500, 2003-15.
- PI, State University of New York, School of Management, **Small Grants Award**, approx. $ 10,650/-, 2003-15.
- PI, **Individual Development Award**, State of New York and United University Professions, competitively awarded; approx. $1,800.00 each year, 2003-06. .
- Senior Personnel. **Research Planning Grant** for $10,000. "Securing the Cyberspace – A Planning Proposal," Office of Vice President for Research, State University of New York at Buffalo, competitively awarded in November 2002.
- Workshop on Conceptual Modeling of Web (Business Model for E-Commerce using ER diagram and UML (NSF Fund), Individual support Amount $2,500, Status – Awarded, 1999: PI: Dr. Peter Chen
- PI, **Equipment Grant** from Digital Equipment Corporation (1994). Awarded equipment worth $3,500 for School of Veterinary Medicine, LSU. Area: Infrastructure enhancement.
- **Internal Planning grant**. Senior Personnel. Funded by the Dean of SOM and the Dean of Informatics, $10,000, 2003-2004.

Refereed Conference Papers, Posters and Proceedings

Mulgund, P., Sharman, R., Sun, Y., Tomblin, S., "Patient referrals in Urban Vs Rural areas: Impact of physician experience and online ratings", 2020 Decision Sciences Institute Annual Conference, San Francisco, California, November, 2020.

Qu, J., Sharman, R., Wang, C. "Coordination of Hospital Physician Visit and Telehealth Visit for Outpatients", 2020 Decision Sciences Institute Annual Conference, San Francisco, California, November, 2020.

Sun, Y., Sharman, R., "The Performance Efficiency of AI Investment across Countries: Application of Stochastic Production Frontier Model", 2020 Decision Sciences Institute Annual Conference, San Francisco, California, November, 2020.

Qu, J., Jiang, M., Sharman, R., Das, S., Howell, P. and Fox, C., "Incentive, behavior, and outcomes: a review of healthcare payment model" 2019 Decision Sciences Institute Annual Conference, New Orleans, Louisiana, November, 2019.

Qu, J., Jiang, M., Sharman, R., Smith, S., Howell, P., Fox, C., "A Multilevel Cost-saving Modeling of Accountable Care Organizations", INFORMS, Annual Conference, Seattle, Washington, October, 2019.

Mulgund, P., Sharman, R., and Purao, S., "Classifying information needs of Sexually Transmitted Diseases (STD) patients – A design science approach", INFORMS Healthcare Conference 2019, , Cambridge, Massachusetts, July 27 – 29, 2019

Gaia, J., Sharman, R. and Alyaqub, M. H., "Coordination in Collaboration: A Resource Allocation Study in Simultaneous Extreme Events" 2018 Decision Sciences Institute Annual Conference, Chicago, Illinois, November, 2018.

Howell, P. and Sharman, R., "Examining the Impact of IT-Enabled Medicaid Health Homes on Reducing Healthcare Costs", The Conference on Health IT and Analytics (CHITA), Washington DC, November 2018.

Ivanov, A., "Using Twitter to Predict County-Level Cancer Mortality: Five Stages of Grief Framework", 24th Americas Conference on Information Systems (AMCIS), New Orleans, Louisiana, August 2018.

Kumar, S., Kishor, S., Gupta, M., and Sharman, R., "Challenges and opportunities for Auditing with Blockchain", 13th Annual Symposium on Information Assurance (ASIA'18), June 5-6, 2018, Albany, NY.

Vasishta, N. A., Gupta, M., Misra, S. K., Mulgund, P., and Sharman, R., "Optimizing Cybersecurity Program - Evidence from Data Breaches in Healthcare", 13th Annual Symposium on Information Assurance (ASIA'18), June 5-6, 2018, Albany, NY.

Venkatesan, S., Sharman, R., Kumar, A., and Bezawada, R., "Mitigating Data Quality Hurdles in Patient-to-Patient Portals Dealing With Parkinsons Disease", Workshop on Information Technologies and Systems (WITS), Seoul, South Korea, December 14-15, 2017.

Abdelhamid, M., Sharman. R., and Bezawada, R., "Patient Empowerment through Role-Based Access Control Mechanism for patients in Health Information Exchanges", Workshop on Information Technologies and Systems (WITS), Seoul, South Korea, December 14-15, 2017.

Mulgund, P., Sen, P, Gupta, M., Sharman, R., and Subraminain, S., "HIPAA Omnibus Rule: Impact of Affiliated Entities on Covered Entities", Workshop on Information Technologies and Systems (WITS), Seoul, South Korea, December 14-15, 2017.

Mulgund, P., Venkatesan, S., Gupta, M. and Sharman, R., "Managerial Perspectives Based Classification of Countermeasures Against Distributed Denial of Service Attacks", Poster, Workshop on Information Technologies and Systems (WITS), Seoul, South Korea, December 14-15, 2017

Howell, P., and Sharman, R. "Assessing the Impact of Clinical Decision Support System Effectiveness on Net Benefits within an Accountable Care Organization", AIS Special Interest Group (SIG) for Health Workshop, Seoul, South Korea, December 13, 2017.

Abdelhamid, M., and Sharman, R., "Can Offering Patients Access to PHR Improve Sustainability of HIE?", 23rd Americas Conference on Information Systems (AMCIS), Boston, Massachussetts, August 2017.

Abdelhamid, M., Howell, P. and Sharman, R., "The Impact of Information and system Quality on Emergency Notification Systems Adoption", 23rd Americas Conference on Information Systems (AMCIS), Boston, Massachussetts, August 2017.

Venkatesan, S., Sharman, R., Kumar, A., Bezawada, R., "Mitigating Data Quality Hurdles in Patient-to-Patient Portals: Are Online Cues Predictors of Good Responses?", The Conference on Health IT and Analytics (CHITA), Washington DC, 2017.

Srikanth, S. and Sharman, R., "Are Expert Patients Popular in Online Patient Portals?", 22nd Americas Conference on Information Systems (AMCIS), San Francisco, California, August 2016.

Mulgund, P., Gupta, M., Singh, S., Walia, S. and Sharman. R., "Framework to Analyze the Vulnerabilities in IOT", 12th Annual Symposium on Information Assurance (ASIA'17), June 7-8, 2017, Albany, NY.

Monterio, J., Abdelhamid, M., Srikanth, S. and Sharman, R., "Internet as Preferred Health Information Source: An Information Foraging Perspective", 22nd Americas Conference on Information Systems (AMCIS), San Francisco, California, August 2016.

Ivanov, A. and Sharman, R., "Exploring the Impact of Third-Party Web Tracking on the Healthcare Providers' Business Value", 22nd Americas Conference on Information Systems (AMCIS), San Francisco, California, August 2016.

Howell, P., Abdelhamid, M. and Sharman, R., "Patient Adoption of Smart Cards", 22nd Americas Conference on Information Systems (AMCIS), San Francisco, California, August 2016.

Monterio, J., Mulgund, P. and Sharman, R., " A Framework for Next Generation iCBT Applications for SAD Patients", 22nd Americas Conference on Information Systems (AMCIS), San Francisco, California, August 2016.

Gupta, M., Gopalkrishnan, G., and Sharman, R., "Countermeasures against Distributed Denial of Service", 11th Annual Symposium on Information Assurance (ASIA'16), June 8-9, 2016, Albany, NY.

Venkatesan, S. and Sharman, R., "Impact of Network Configuration on Welfare of Parkinson's Disease Patients in Online Social Networks", 2nd International Conference on Big Data and Analytics for Business, New Delhi, India, March 17-18, 2016. Best Research Paper Award.

Venkatesan, S. Sharman, R., Kharub, P. and Singh, P. "Three Decades in Evolution of Research on E-Commerce Metrics: A Nomological Network Perspective", The Fourteenth Workshop on E-Business (WeB 2015), Fort Worth, Texas, USA, December 12, 2015.

Venkatesan, S., Han, W., Sharman, R., Singh, A., Shastri, H., Singh, R., "Quality of Patient-Patient Interactions In Online Health Communities: Is What You See Indeed What You Get?", The Fourteenth Workshop on E-Business (WeB 2015), Fort Worth, Texas, USA, December 12, 2015.

Ivanov, A., Sharman, R., and Rao, H. R., "The Impact of Internet User-Generated Measures on Prominence of U.S. Cancer-Treatment Hospitals: An Empirical Study", The Fourteenth Workshop on E-Business (WeB 2015), Fort Worth, Texas, USA, December 12, 2015.

Ivanov, A., Bezawada, R., Sharman, R., "Determining the Role of Online Rating Status, Topics Discussed in the Reviews, and Sentiment on the Oncologists' Medicare Referral Rate", Workshop on Information Technologies and Systems (WITS) , Fort Worth, Texas, USA, December 12-13, 2015.

Abdelhamid, M, Sharman, R., Bezawada, R., "Better Patient Privacy Protection with better patient empowerment about Consent with Health Information Exchanges", Workshop on Information Security and Privacy (WISP) 2015, Fort Worth, Texas, USA, December 13, 2015

Ivanov, A., Sharman, R., Bezawada, R., "Comparing the Impact of Online Ratings on Healthcare Provider Business Value across Census Regions", 2015 INFORMS Conference on Information Systems and Technology Philadelphia, Pennsylvania, USA, Oct 31 - Nov 1, 2015.

Han, W., Sharman, R., Rao, H. R., "Understanding Switching Subscription Behavior in the Context of Campus Emergency Notification Services: An Extended Privacy Calculus Model", International Conference on Information Systems (ICIS 2015), Fort Worth, Texas, USA, December 13-16, 2015.

Kisekka, V., Sharman, R., , Gerber, N., Upadhaya, S., Rao, H. R., "Investigating the Antecedents of Organizational Resilience in Hospitals After an Extreme Event", International Conference on Information Systems (ICIS 2015), Fort Worth, Texas, USA, December 13-16, 2015.

Abdelhamid, M, Sharman, R., Bezawada, R., "Fostering Patient Informed Consent to Sharing Personal Health Information: A Field Experiment", 6th Annual Workshop on Health IT & Economics, Washington DC, October 9-10, 2015.

Ivanov, A., Bezawada, R., Sharman, R., "The Impact of Online Ratings and Reviews on New Patient Referrals", 6th Annual Workshop on Health IT & Economics, Washington DC, October 9-10, 2015.

Monteiro, J., Austin, M., Mandilwar, G., and Sharman, R. "Smart City App", Proceedings of the 10th Design Science Research in Information Systems and Technologies (DESRIST), Dublin, Ireland, May 21-22, 2015.

Han, W. Mulgund, P, Sharman, R., Singh, G., Singh, R., "Self Health Management Mobile Application for Diabetic Patients and the Impact on Treatment Adherence", International Conference on Information Systems (ICIS 2014), Auckland, New Zealand, December 14-17, 2014.

Venkatesan, S., Han, W., Sharman, R., "A Response Quality Model for Online Health Communities", International Conference on Information Systems (ICIS 2014), Auckland, New Zealand, December 14-17, 2014.

Kisekka, V., Sharman, R., Rao, H. R., Upadhyaya, S., Gerber, N., "Investigating the Antecedents of Organizational Resilience in Hospitals", 5th Annual Workshop on Health IT & Economics, Washington DC, October 10-11, 2014.

Venkatesan, S., Han, W., Sharman, R., Shastri, H., Singh, A., and Singh, R., "Credibility of Health Information – An Assessment of Online Diabetes Community", 5th Annual Workshop on Health IT & Economics, Washington DC, October 10-11, 2014.

Han, W., Sharman, R., Singh, R., Singh, G., "Impact of Electronic Diabetes Registry Use on Care and Outcomes in Primary Care", 19th Americas Conference on Information Systems (AMCIS), Savanah, Georgia, August 2014.

Kisekka, V., Han, W., and Sharman, R., "Utilizing the Uses and Gratification Theory to Understand Patients Use of Online Support Groups", 19th Americas Conference on Information Systems (AMCIS), Savanah, Georgia, August 2014.

Mulgund, P., Han, W., Sharman, R., Updhya, A., Reddy, S., Vishwanath, B., Miriyapalli V., Jiwane, K., Singh, R. and Singh G., "Personalized Medication Adherence Motivating and Reminding System (PMAMRS)", Proceedings of the 9th Design Science Research in Information Systems and Technologies (DESRIST), Miami, Florida, 2014, pp. 448-452.

Monteiro, J., Yuan, S., Upadhya, A., Mulgund, P., Malaviya, M. and Sharman, R., "Mass Shooting Incident Response Optimization System: Development of Situational Aware Incident Response System", Proceedings of the 9th Design Science Research in Information Systems and Technologies (DESRIST), Miami, Florida, 2014, pp. 428-432

Lala, S., Gupta, M. and Sharman, R., "Case Study Paper: Fraud Detection through Routine Use of CAATTs", Annual Symposium for Information Assurance (ASIA 2014), Albany, New York, June 2014.

Venkatesan, S., Han, W., Kisekka, V., and Sharman, R., "Misinformation in Online Health Communities." Workshop on Information Security and Privacy (WISP), Milan, Italy, 2013.

Han, W., Sharman, R., Singh, R., Singh, G. "The Impact of Practice Size and Meaningful Use Engagement on the Usage of Clinical Decision Support Systems and Practice Productivity." Workshop Decision Support, Knowledge and Data Management Systems (AIS SIGDSS) Workshop, Milan, Italy, 2013.

Yaraghi, N., Du, A.Y., Sharman, R., Gopal, R., and Ramesh, R. ``Now You Can See Me: A Bayesian Analysis of Disclosure of Medical Information on Health Information Exchange Networks," under review at Workshop on Information Systems and Economics (WISE) , Milan, Italy, December 2013.

Yaraghi, N., Du, A.Y., Sharman, R., Gopal, R., and Ramesh, R. ``Health Information Exchange as a Multi-sided Platform: Adoption, Usage and Practice Involvement in Service Co-production," Workshop on Health Information and Economics (WHITE), Washington, DC, November 2013.

Yaraghi, N., Du, A. Y., Sharman, R., Gopal, R., and Ramesh, R. ``Consenting Adults: Why Do Patients Disclose Their Medical History on Health Information Exchange Platforms?" INFORMS Conference on Information Systems and Technology (CIST), Minneapolis, MN, October 2013.

Han, W, Valecha, R., Sharman, R., Sanders, G. L., "Impact of Security and Privacy Concerns among Medicare Patients on Sharing Health Information Online", Annual Symposium for Information Assurance (ASIA 2013), Albany, New York, June 2013.

Valecha, R., Sharman, R., Rao, H. R., an Upadhyaya, S.," Collaboration Patterns in Local Emergency Communications: A "Gated" Language Action Perspective", Design Science Research in Information Systems and Technologies (DESRIST), Helsinki, Finland, June 2013.

Yaraghi, N., Du, A. Y., Sharman, R., Gopal, R., and Ramesh, R. ``Modeling Practice Efficiencies in Healthcare Information Exchanges and Implications for HIE Network Growth," Workshop on Information Technologies and Systems (WITS) , Orlando, FL, December 2012.

Valecha, R., and Sharman, R., "Modeling Language for Emergency Response Systems (MLERS)", 12th Workshop on E-Business (Web 2012), Orlando, Florida, December 2012.

Kisekka, V., and Sharman, R., "Online Healthcare Communities: A Literature Review and Classification", 12th Workshop on E-Business (Web 2012), Orlando, Florida, December 2012.

Ngniatedema, T., Sharma, C., and Sharman, R., "Popularizing Blogs: A Deeper Understanding Using The Bass Diffusion Model", 12th Workshop on E-Business (Web 2012), Orlando, Florida, December 2012.

Park, I., Sharman, R., and Rao, H., R., "The Role of Resilience in Information Systems in Hospitals", 12th Workshop on E-Business (Web 2012), Orlando, Florida, December 2012.

Singh, P., Venkatesan, S., and Sharman, R., "E-Commerce Metrics: A Decade In Review", 12th Workshop on E-Business (Web 2012), Orlando, Florida, December 2012.

Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S., "Design Principles for Emergency Collaborative Systems: A Situation Awareness Study of Buffalo Plane Crash", 17th Americas Conference on Information Systems (AMCIS), Detroit, Seattle, Washington, August, 2012.

Yaraghi, N., Du, A. Y., Sharman, R., Gopal, R., Ramesh, R., Singh, R., and Singh, G. "Professional and Geographical Network Effects on HIE growth," Workshop on Health Information and Economics (WHITE) , Washington, DC, October 2012.

Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S., "Messaging Model for Emergency Communication" Proceedings of the Mid-West Association for Information Systems (MWAIS 2012), Green Bay, Wisconsin, May 17-18, 2012. (Awarded Third Place).

Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S., "Improving Emergency Dispatch Systems: An Exploration of the Effect of Resource Allocation on Message Exchange" Proceedings of the Mid-West Association for Information Systems (MWAIS 2012), Green Bay, Wisconsin, May 17-18, 2012.

Srivastava, S., Han, W., Sharman, R., "Managiing Campus Shooting Incidents through Emergency Notification Systems: An insight into the issue of student compliance", Proceedings of the Mid-West Association for Information Systems (MWAIS 2012), Green Bay, Wisconsin, May 17-18, 2012.

Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S., "An Investigation of Collaborative Emergency Response Systems for the Elderly", Proceedings of the Seventh International Conference on Design Science Research in Information Systems (DESRIST 2012), Las Vegas Nevada, May 14-15, 2012.

Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S., "Emergency Response System Design: An Examination of Emergency Communication Messages", Proceedings of the Seventh International Conference on Design Science Research in Information Systems (DESRIST 2012), Las Vegas Nevada, May 14-15, 2012.

Yaraghi, N., Ye Du, A., Sharman, R., Gopal, R., Ramesh, R., Singh, R., & Singh, G. "Clustering Physicians Based on Professional Proximity Using SAS". In SAS Global Forum 2012

conference, SAS Institute, Inc., April 22-25, 2012 , pp. 184-2012 , Orlando, Florida.: SAS Institute, Inc.

Han, W., Ada, S., Sharman, R., Rao, H. R., and Brennan, J., "Critical Factors Affecting Compliance to Campus Alerts", International Conference on Information Systems (ICIS 2011), Shanghai, China, December 4-7, 2011.

Xiao, N., Sharman, R., Rao, H., R., Singh R., and Singh, G., "Will 'Meaningful Use' of EMR Improve the Quality and Efficiency of Healthcare? An Exploratory Analysis of Ambulatory EMR Usage", International Conference on Information Systems (ICIS 2011), Shanghai, China, December 4-7, 2011.

Yaraghi, N., Du, A. Y., Sharman, R., Gopal, R., and Ramesh, R. ``Interlinked Network Effects in Healthcare Information Exchange Growth,'' Workshop on Information Technologies and Systems (WITS), Shanghai, China, December 2011 (Nominated for the Best Paper Award)

Parameswaran, S., Venkateshan, S., Gupta, M., Sharman, R., and Rao, H. R., "Impact of Cloud Computing Announcements on Firm Valuation", 17th Americas Conference on Information Systems (AMCIS), Detroit, Michigan, August, 2011.

Han, W., Ada, S., Sharman, R., Rao, H. R., and Brennan, J., "Critical Success Factors to Improve Compliance with Campus Emergency Notifications", 17th Americas Conference on Information Systems (AMCIS), Detroit, Michigan, August, 2011.

Xiao, N., Sharman, R., Rao, H., R., Singh R., and Singh, G., "EHR Adoption and Patient Safety: The Role of EHR and Health Care Provider Characteristics", 17th Americas Conference on Information Systems (AMCIS), Detroit, Michigan, August, 2011.

Kisekka, V., Sharman, R., Singh, R., and Singh, G.,"Misinformation in Healthcare Social Networks: Contributing Factors", 17th Americas Conference on Information Systems (AMCIS), Detroit, Michigan, August, 2011.

Gupta, M., Sharman, R., and Rao, H. R., "Framing Effects of Crisis Response Communications on Market Valuation of Breached Firms", Annual Symposium on Information Security, Albany New York, June , 2011. (Best Paper Award).

Xiao, N., Sharman, R., Singh, R., Singh, G, and Rao, H., R., "How Do EMR Functionalities Affect Health Care Outcomes? An Exploratory Analysis in Ambulatory Settings", 2011 Workshop on Health Information and Economics (WHITE), Washington DC, October 2011.

Yaraghi, N., Sharman, R., Singh, R., and Singh, G. ``Application of Monte Carlo Analytical Hierarchy Process in Prioritizing Electronic Medical Record Success Factors,'' Symposium on Healthcare Advancements in Research and Practice (SHARP) , Moorhead, MN, April 2011.

Yaraghi, N., Du, Y., Sharman, R., Gopal, R., Ramesh, R., "Interlinked Network Effects in Healthcare Information Exchange Growth", Interlinked Network Effects in Healthcare

Information Exchange Growth, Workshop on Information Technology and Systems, Shanghai, China, December 2011. (Nominated for Best Paper Award).

Valecha, R., Sharman, Monteiro, J , R, Rao, H. R., Upadhaya, S., Keerthana, S., Patel, M, Singh, A., Sharma, K.,'A Prototype of a FIRE-RELATED EXTREME EVENTZ SYSTEM (FREEZ)', Workshop on Information Technology and Systems (WITS), St. Louis, December 2010. (Best Prototype Award).

Ada, S., Rao, H., R., Sharman, R., "Online Social Networking Site (Sns) Use at the Campus Emergencies, International Conference on Information Systems (ICIS), St. Louis, December 2010.

Gupta, M., Sharman, R., and Das-Smith, S., "Phased Implementation of Security System: A cost-optimization Model Development" Workshop on E-Business (Web 2010), St. Louis, December 2010.

Gupta, M., Sharman, R. and Rao, H., R., "Timing of Corporate Crisis Response to Security Breaches: Impact on Market Valuation", Workshop on Information Systems Security (WISP), St. Louis, December 2010.

Sanjukta Das, Raj Sharman, Manish Gupta and Varun Kutty. (2010). "A Multi-staged Approach to Risk Management in IT Software Development", Proceedings of 5th Annual Symposium on information Assurance (13th Annual New York State Cyber Security Conference), Albany, NY, June 16-17, 2010.

Park, I., Sharman, R., and Rao, H. R., "On the Two Factors Affecting Information Systems Success in Extreme Event Context". Proceedings of the seventh Workshop on e-Business (WeB2008), Arizona, December 2009.

Xiao, N., Dutta, S., Sharman, R., and Rao, H.R. "A Simulation-based Study in A Hospital Emergency Department: Capacity and Workflow Issues," 15th Americas Conference on Information Systems (AMCIS), San Francisco, California, August 2009.

Gupta, M., and Sharman, R., "Data Security Breach Trends and Exposures: An Exploratory Analysis", Proceedings of 7th Annual Conference on Information Science Technology and Management (CISTM 2009), Gurgaon, India, July 13 - 15, 2009.

Gupta, M., Bannala, K., and Sharman, R., "Re-evaluating Single-Sign-On System Design Risks: An Activity Theoretic Approach". Proceedings of 4th Annual Symposium on Information Assurance (12th Annual New York State Cyber Security Conference), Albany, NY, June 3-4, 2009.

Sudumbrekar, K., Xiao, N., Sharman, R., and Das-smith, S. "Security Enhanced Integrative Modeling Language (SEIML): A conceptual modeling grammar for agile business information systems," 4th International Conference on Design Science Research in Information Systems and Technology (DESRIST), Malvern, PA, 2009.

Serkan, A., Sharman, R., and Balkundi, P., "When Information Technology Matters: A Meta-analysis", Proceedings of the Academy of Management Annual Meeting, August 7-11, in Chicago, Illinois, 2009.

Chen, R., Sharman, R., Rao, H. R., and Upadhyaya, S., "Data Model Development for Fire Related Extreme Events – An Activity Theory and Semiotics Approach," the International Conference on Information Systems, Paris, France, Dec. 14-17, 2008.

Gupta, M., and Sharman, R., "Evaluating Risks in the Context of Information Security Technology Acquisition: A Portfolio-Theoretic Framework". Proceedings of the seventh Workshop on e-Business (WeB2008), 13 Dec, 2008, Paris, France.

Xiao, N., Sharman, R., Rao, H.R., and Upadhyaya, S.J. "Infrastructure Interdependencies Modeling and Analysis - A Review and Synthesis," 14th Americas Conference on Information Systems, Toronto, Ontario, 2008.

Chen, R., Sharman, R., Rao, H. R., and Upadhyaya, S., "Information Theoretic Approach to Design of Emergency Response Systems," the 14th Americas Conference on Information Systems, Toronto, ON, Aug 14-17, 2008.

Gilbert, B., Sharman, R., Gupta, M., Rao, H. R., Upadhyaya, S., and Mortensen, K., "Content-Sensitive, temporally Adaptive Metadata", Proceedings of 3rd Annual Symposium on Information Assurance (11th Annual New York State Cyber Security Conference), Albany, NY, June 4-5 2008. (Best Paper Award).

Gupta, M., and Sharman, R., "Evaluating Organizational Social Engineering Threats: A Metrics Development Framework", Proceedings of the 7th Annual Security Conference, Las Vegas, June 2-3, 2008.

Serkan, A., Sharman, R., and Balkundi, P., "Testing the Business Value of IT- a Meta-Analysis", International Symposium on Information Systems (ISIS), ISB, Hyderabad, India, December 2008.

Chen, R., Sharman, R., Rao, H. R., and Upadhyaya, S., "Organizational Coordination in Extreme Events: A Case Study of Incident Response for October '06 Snowstorm in Western New York," the Fifth Pre-ICIS SIG DSS Workshop, Montreal, Canada, December 9, 2007.

Park, I., Sharman, R., Rao H. R., and Upadhyaya, S., "Critical Risk Factors Affecting the Effectiveness of Public Health Information Systems Infrastructure", INFORMS Annual Conference, Seattle, Washington, November 2007.

Chen, R., Sharman, R., Rao, H. R., and Upadhyaya, S., "Emergency Response Coordination and IT Support: Contingency and Strategies", Americas Conference on Information Systems (AMCIS) 2007, Keystone, Colorado, 2007.

Gupta, M., Bryan, D., Sharman, R., and Li, P., "A Financial Services Case Study On Enterprise Single-Sign-On Implementation", Proceedings of Conference on Information Science, Technology and Management (CISTM 2007), Hyderabad, India, July 16-18, 2007

Park, I., Sharman, R., Rao H. R., and Upadhyaya, S., "The Impact of Interdependent Risk on Health Care Information Infrastructure Effectiveness", Second Annual Symposium on Information Assurance: Intrusion Detection and Prevention, Albany, New York, June 2007.

Sangmi, C., Sharman, R., Patil, S., Satam, S., Rao, H. R., and Upadhyaya, S., "Surface Transportation and Cyber-Infrastructure: An Exploratory Study", IEEE International Conference, Proceedings of the Symposium on Intelligence and Security Informatics, Springer-Verlag Lecture Notes in Computer Science, New Jersey, May 2007.

Gupta, M., and Sharman, R., "Cross-Enterprise Identity Federation (OASIS - SAML) Implementation: An Exploratory Financial Services Case Study," 6th Annual Security Conference, Las Vegas, Nevada, April 2007.

Cody, E. and Sharman, R., "Expectancy Theory and HIPAA Disaster Management Regulations," Workshop on E-Business, Milwaukee, Wisconsin, 2006.

Gupta, M., Sharman, R. and Tejay, G., "SAML based Role Hierarchy Preservation Model for Cross-enterprise Identity Federation," The Second Secure Knowledge Management Workshop (SKM), New York, New York, September 2006.

Chakravarti, N., Chen, R., Sharman, R., Rao, H. R., and Upadhyaya, S., "Common Operating Vocabulary Extensions For Emergency Management: Case of A Chemical Spill Incident," The Fourth Annual Center for Advancing Business through Information Technology (CABIT) Symposium, Phoenix, Arizona, September 2006.

Gupta, M., and Sharman, R., "Social Network Theoretic Framework for Organizational Social Engineering Susceptibility Index," Proceedings of the Americas Conference on Information Systems (AMCIS) 2006, Acapulco, Mexico, August 2006.

Wang, J, Sharman, R., and Zionts, S., "A Design Framework to Information System Functionality Defense through Diversity," Proceedings of the Americas Conference on Information Systems (AMCIS) 2006, Acapulco, Mexico, August 2006. (Won Best Paper Award).

Tallau, L., and Sharman, R., "The Balanced Scorecard: Application for Making Security Investment Decisions," Proceedings of the Conference on Information Science, Technology and Management (CISTM), Chandigarh, Punjab, India, 2006.

Kim, J. K., Sharman, R., Rao, H. R., and Upadhyaya, S., "Framework for Analyzing Critical Incident Management Systems (CIMS)," Proceedings of the Hawaii International Conference on System Sciences (HICSS), Hawaii, January 2006.

Kim, J. K., Sharman, R., Rao, H. R., and Upadhyaya, S., "Instrument to Measure the Risk Framework of Critical Incident Management Systems (CIMS)," Proceedings of the Workshop on E-Busines (WeB) 2005, pre-ICIS workshop, Las Vegas, Nevada, December 2005.

Chen, R., Sharman, R., Rao, H. R., and Upadhyaya, S., "Design Principles of Coordinated Multi-Incident Emergency Response Systems," IEEE International Conference, Proceedings of the Symposium on Intelligence and Security Informatics, Springer-Verlag Lecture Notes in Computer Science, Atlanta, May 2005.

Kim, J. K., Sharman, R., Rao, H. R., and Upadhyaya, S, "Risk Assessment in the Context of Emergency Response Systems," Proceedings of the Symposium on Risk Management and Cyber-Informatics, July 2005.

Kim, J. K., Sharman, R., Rao, H. R., and Upadhyaya, S., "Synthesized Risk Management against Cyber Attacks in the context of Emergency Response Systems, Proceedings of the Americas Conference on Information Systems (AMCIS) 2005, August 2005.

Ganguly, S., Sharman, R., Rao, H. R., and Upadhyaya, S., "A Distributed, Scalable, User-Governed Approach to Identity Management, The 4th Annual Security Conference, OneWorld, April 2005.

Sarkar, I., and Sharman, R., "A Dual Metric Approach Towards Similarity Measurement in Image Registration," Proceedings of the IEEE Annual Canadian Conference on Electrical and Computer Engineering, May 2005.

Vishnu A. S, Sinha R., K., Subash-Babu, A., and Sharman, R., "Managing Agility in a Real Life Supply Chain System: A Simulation Study," International Conference on Agile Manufacturing (ICAM) 2005, Helsinki, Finland.

Ryu, C., Sharman, R., Rao, H. R., and Upadhyaya, S., "Economics of Decoy Systems," Proceedings of the Workshop on E-Business (WEB) 2004, Washington D.C., December 2004.

Sharman, R., Rao, H. R., and Upadhyaya, S., "Metrics for Information Security – A Literature Review," Proceedings of the Americas Conference on Information Systems (AMCIS) 2004, New York City, New York, 2004.

Sharman, R., Challapalli, H., Rao, H.R., and Upadyaya, S., "A Framework for a Secure Federated Patient Healthcare System," in proceedings of Symposium on Intelligence and Security Informatics, Springer-Verlag Lecture Notes in Computer Science, June 2004.

Sinha, R. K., Vishnu A. S, Subash-Babu, A., Sharman, R., "A Simulation Study of a Real Life Supply Chain System," the 33rd International Conference on Computers & Industrial Engineering, Jeju, Korea, March 25-27, 2004.

Sharman, R., Rao, H. R., Shambhu, U., Khot, P, Ganguly, S., and Manocha, S., "Functionality Defense by Heterogeniety: A New Paradigm for Security," Hawaii International Conference on System Sciences (HICSS). Hawaii, January 2004.

Zhang, H., Kishore, R., Sharman, R., and Ramesh, R., "The GRITIKA Ontology for Modeling e-Service Applications: Formal Specification and Illustration," Hawaii International Conference on System Sciences (HICSS). Hawaii, January 2004.

Hong, Z., Kishore, R., Ramesh, R., and Sharman, R "The GRITICKA Ontology for Modeling Multiagent-Based Integrative Business Information Systems". Proceedings of the Americas Conference on Information Systems (AMCIS) 2003, Tampa, Florida, August 2003. (Nominated for Best Paper Award).

Kishore, R., Ramesh, R., Sharman, R., "Computational Ontologies: Foundations, Representations, and Methods," Invited Tutorial at Americas Conference on Information Systems (AMCIS), Tampa, Florida, August, 2003.

Sharman, R., and Fabian, F. "Information Sharing Framework for supply chains," International Conference on Information Systems (ICIS): Workshop on Information Systems Theory Development, Barcelona, Spain, December, 2003.

Sharman, R., and Rao, H., R., "Research Frontiers in Conceptual Modeling," Pre-international Conference on Information Systems (ICIS), Panel Discussion, Workshop on Information Technology and Systems, Barcelona, Spain, 2003.

Sharman, R. and Buckles, B., "Data Mining: Concepts, Practice and Research," SPIE, Conference of AeroSense, Aerospace / Defense Sensing and Controls, Orlando, Florida. April 2001. (Tutorial).

Sharman, R., "Data Warehousing – a project management focus," South Central U.S. Oracle User's group, New Orleans, LA., 2000.

Sharman, R. and Buckles, B., "Data Mining and Image Database: New Challenges and Opportunities," Invited Tutorail at Artifical Neural Network in Engineering Conference (ANNIE), St. Louis, Missouri, November 2000.

Sharman, R., Tyler J. M., and Oleg P., "Compensating for wavelet sensitivity to translation in image registration applications," accepted for presentation and publication in the Proceedings of the SPIE, Conference on AeroSense, Aerospace / Defense sensing and Controls, Orlando, Florida, April 5-9, 1999.

Sharman, R., Tyler J. M., and Oleg P., "Registration and restoration of objects in images subjected to shear using wavelets," Proceedings of the SPIE, Conference on AeroSense, Aerospace / Defense sensing and Controls, Orlando, Florida, April 13-17, 1998.

Oleg, P., Tyler, J. M., and Sharman, R., " Parallel Methods for Similar Image Compression and Classification with Common Models," Proceedings of the SPIE, Annual Conference, Parallel and Distributed Methods for Image Processing II, San Diego, California, July 1998.

Oleg, P., Tyler, J. M., and Sharman, R., "Auto Regressive Models for Compressing Images of the Same Nature," Proceedings of the SPIE, Conference on AeroSense, Aerospace / Defense sensing and Controls, Orlando, Florida, April 13-17, 1998.

Sharman, R., Tyler, J. M. and Oleg, P., "Registration of Medical Images on Massively Parallel machines," Proceedings of the SPIE, Annual Conference, Application of Digital Image Processing XX, Optical Science, Engineering and Instrumentation, July 1997.

Sharman, R. and Tyler, John M., "Wavelet based registration and compression of Sets of Images," Proceedings of the SPIE, Conference on AeroSense, Aerospace / Defense sensing and Controls, Orlando, Florida, April 1997.

Other Conference Papers

Kishore, R., Sharman, R., Zhang, H., and Ramesh, R. "MibML: A Conceptual Modeling grammar for Integrative Business Information Systems using the Agent Metaphor," Information and Decision Sciences Research Workshop, University of Minnesota, Minneapolis, MN, April 2004.

Sharman, R., "E-Marketplaces: An Information System Perspective for Integration and Security," Pankaj Sinha, David McDonough & Raj Sharman, Tulane Consortium for Supply Chain Management, December 2000.

Sharman, R., "ERP in the US and Developed Countries: Global Perspectives," Conference on Enterprise Resource Planning Systems: Development and Application, Indian Institute of Technology, Bombay, India, July 1999.

Sharman, R., "Experiences with SAP System in the US and Developing Countries," Conference on Enterprise Resource Planning Systems: Development and Application, Indian Institute of Technology, Bombay, India, July 1999.

Sharman, R., "ERP Implementation Issues: Client Server View," Conference on Enterprise Resource Planning Systems: Development and Application, Indian Institute of Technology, Bombay, India, July 1999.

Sharman, R. and Tyler, John M., "Wavelet-based Registration of Images," Conference on Wavelets and Operators, Conference at UNCC Charlotte, Sponsored by UNCC Charlotte, AFSOR and NSF, July 1996.

Selected Invited Lectures and Presentations

Sharman, R., Expert Panelist, 'Impact of HIPAA Omnibus Rule', BlueCross Blue Shield, Buffalo, New York, Sponsored by iSECURE, Nov., 2013.

Singh, R., Singh, A., McLean, D., Brooks, R., Fox, C., Sharman, R., and Singh, G., "Enhancing Meaningful Use of IT in Healthcare: Improving Transitions in Patient Care",World Congress on Computer Science and Information Engineering (CSIE 2011), Changchun, China, June 2011.

Han, W., Ada, S., Sharman, R., Rao, H. R., and Brennam, J., "Communicating Time Sensitive Information to Students Through ICT – The Matter of Compliance", First UB2020 Information and Computing Technology Workshop, Buffalo, NY, April 2011.

Kudumula, V., and Sharman, R., "Efficacy of Online Health Communities ", First UB2020 Information and Computing Technology Workshop, Buffalo, NY, April 2011.

Valecha, R., Sharman, R., Rao, H. R.. and "Communication for Situational Awareness during Fire Events", First UB2020 Information and Computing Technology Workshop, Buffalo, NY, April 2011.

Valecha, R., Monteiro, J , Sharman, R., Rao, H. R., Upadhaya, S., Keerthana, S., Patel, M, Thomas, M., Sharma, K., Kisekka, A., 'Fire related Onsite Operations Management System', Workshop on Cyber Security and Extreme Events, Center of Excellence in Information Systems Assurance Research and Education, University at Buffalo, NY. July 2010.

Sharman, R., "Wireless Technology research and practice in the context of disasters," Invited Pannelist, Annual Decision Sciences Institute Symposium, Baltimore, Maryland, Texas, November 2008.

Sharman, R., "Wireless Technology Use in Mitigating Extreme Events," Invited Pannelist, Annual Decision Sciences Institute Symposium, Phoenix, Arizona, November 2007.

Sharman, R., "Current Status of Usage and Applications of Podcasting, Weblog, Camtasia, RFID, and Mobile TV," Invited Pannelist, Annual Decision Sciences Institute Symposium, San Antonio, Texas, November 2006.

Sharman, R., Kim, J. K., Rao, H. R., and Upadhyaya, S., "A Dephi Study on Priorities – Lessons Learned from the Gulf Coast," First Annual Symposium on Information Assurance: Intrusion Detection and Prevention, Albany, New York, June, 2006.

Sharman, R., "Future of Communications in Emergency Response Management," Workshop on Workshop: Future Communication Requirements for Emergency Response, Third International Conference on Information Systems for Crisis Response and Management, Newwark, New Jersey, May 2006, Invited Keynote Presentation.

Sharman, R., "Electronic Monitoring," Invited Pannelist, The 5th Annual Security Conference, Nevada, Las Vegas, March 2006.

Sharman, R., "Wireless Applications in Disaster Management," Invited Pannelist, Annual Decision Sciences Institute Symposium, San Francisco, California, November 2005.

Kim, J. K., Sharman, R., Rao, H. R., and Upadhyaya, S., "Risk Management Issues in the Context of Emergency Response Systems," 15th World Conference on Disaster Management, Toronto, Canada, July 10-13, 2005.

Sharman, R., "Mining for Intrusion Detection." Virginia Commonwealth University, Richmond, Virginia, April, 2005.

Sharman, R., "Current State of Usage and Applications of Mobile Business in various Countries," Invited Pannelist, Annual Decision Sciences Institute Symposium, Boston, November 2004.

Sharman, R., "Change Management for Enterprise Integration" Invited Presentation at IIT Bombay and at Baja Auto (Pimpri, Maharashatra, India) as part of IIT Bombays outreach program, June 2004.

Sharman, R., "Web Caching and Mobile Commerce," Invited Pannelist, Annual Decision Sciences Institute Symposium, Washington D.C., November 2003.

Sharman, R., "Inter-organizational Security – an information sharing model," Invited Presentation, 21st International Conference on Conceptual Modeling, Workshop on Security, Tampere, Finland, October 7-11, 2002. (Conference Track Chair: Dr. Peter Chen).

Sharman, R., "Image Registration - a more precise wavelet based method and its impact on image retrieval for Medical Information Systems," Basser Seminar Series, Unviersity of Sydney, Australia, March 2002.

Sharman, R., "Research in Data Mining," Indian Institute of Technology, Bombay, Bombay, India, July 2000 (Invited Talk).

Sharman, R., "Data Mining: Concepts, Practice and Research," SPIE, Conference of AeroSense, Aerospace / Defense Sensing and Controls, Orlando, Florida. April 2000. (Tutorial).

Sharman, R., "Data Warehousing – A Design Focus," South Central US Oracle User's group, Houston, Texas, March 15-16, 2000.

Teaching and Mentoring

Faculty Mentoring:

   Laura Amo (2017- Current) – Tenure Track Assistant Professor, Univ. at Buffalo

Ph.D. Students

   Doctoral Dissertation Committee Chair:

1. Jin Ki Kim (2007), Associate Professor, Korea Aerospace University, South Korea
2. Serkan, Ada (2011, Associate Professor, Selcuk University, Turkey)
3. Wencui Han (2015, Assistant Professor, University of Illinois, Urbana Champaign)
4. Victoria Kisekka (2015, Assistant Professor, SUNY, Albany)
5. Srikanth Venkatesan (2017, Assistant Professor, California State University, Polytech)
6. Joana A Lucena G Schaverien Monteiro (2017, Clinical Assistant Professor, University at Buffalo)
7. Mohamed Abdulhamid (2017, Assistant Professor, California State University, Long Beach, California)
8. Anton Ivanov (2018, Assistant Professor, University of Illinois at Urbana Champaign)
9. Pamella Howell (2018, NIH Fellow, Assistant Professor, California State University, Long Beach, California)
10. Pavan Mulgund (2020, University at Buffalo, NY)
11. Lavlin Agarwal (in progress)
12. Theophile Ndabu (in progress)
13. Jiajia Qu (in progress)
14. Erin O'Brien (in progress)

Doctoral Dissertation Committee Co-Chair:

15. Meling Ziang (in progress)
16. Niam Yaraghi (2014), Assistant Professor, University of Connecticut
17. Nan Xiao (2012), Assistant Professor, University of Texas – Pan American
18. Manish Gupta (2011), Vice-President, M&T Bank, New York
19. Insu Park (2010), Assistant Professor, South Dakota State University of Memphis
20. Rui Chen (2009), Associate Professor, Iowa State University

Doctoral Dissertation Committee Member:

21. Madhusoodhan M (In-Progress, Amrita University, Bangalore India)
22. Sung Jin (2015)
23. Chul Woo Yu (2014), Assistant Professor, Florida International University
24. Jingguo Wang (2006), Associate Professor, Georgia State University
25. Hong Zhang (2005), Held position of Assistant Professor at Missouri State University. Now employed in the private sector in China.
26. Anna Ye Du, Research Associate, Texas A&M College Station, Texas

Doctoral Thesis External Examiner:

27. Dhanashree Mahadevan (IIT Bombay, 2014)
28. N. Sunitha Rao (Visvesvaraya Technological University, 2012)

29. Baru Sreenivas Rao (IIT Bombay, 2004)
30. Uma Ganesh (IIT Bombay, 2003)

MS Students: Selected Independent Study Work (MS in MIS):

1. Mehul Popat (2015, Amazon Services, Seattle, Washington)
2. Ayushee Dhanuka (2015, Bloomberg, 2015)
3. Neelakshi Banerjee (2014, Ernst and Young, Buffalo, NY)
4. Abhiram Upadhyay (2014, Citi Bank, Buffalo, NY)
5. Maria Thomas (2010, Senior Analyst, Deloitte Consulting, LLP, Houston)
6. Priscilla David (Credit Suisse, New York)
7. Rajkumar Indiran (CInsight Inc, Buffalo, NY)
8. Shyam Sundar (Inquira, NY)
9. Meenakshi Deepak (ICICI Bank, India)
10. Riya Faris (working in India)
11. Roopa Ramnath (2008), KPMG Analyst
12. Sumant Dutta (2008), KPMG Analyst
13. Sandhya Raghav (2007), Ernst & Young
14. Esha Rani Uppala (2007), Delloite and Touche, Analyst
15. Mahendra Jain (2007), New Era Cap Inc.
16. Abheer Arte (2007), New Era Cap Inc. Now in Blue Cross Blue Shield of North Carolina
17. Mahendra Jain (2007), New Ear Cap Inc.
18. Evie Gunavan (2006), Ernst and Young, LLP
19. Shruta Satam (2006), Discover Financial Services, Analyst
20. Smitha Patil (2006), KPMG, Analyst
21. Derek Grozio (2005), Hewitt Associates, Orlando, Florida
22. Enrico Reidel (2004), AREVA Nuclear Power, Erlangen, Germany
23. Jesse Lih Lim (2004), Employed in Canada
24. Linda Tallau (2004), Sr. Network Manager, Computer Science and Engineering

Member: MS Computer Science Thesis:

Saumitra Ganguly (2005); Partha Khot (2004); Shiva Shankar Ramanna (2004); Bindu H. Challapalli (2004).

Undergraduate Committee

Sponsored a special undergraduate major in Information Technology and Network Management. (Student Geoffrey Sherman, Graduated, May 2004).

Mentored Minority Student: Leah Thompson through The Buffalo Region SUNY

Alliance for Minority Participation (SUNY LSAMP) program

Geoffrey Sharman (Special Elective Mentor)

Kirti Sharma (2010) – Independent study

Courses Taught

State University of New York at Buffalo

Graduate
  a. Data Visualization (MGS 626)
  b. Advanced Data Systems (MGS 618)
  c. Seminar in Health Information Systems (MGS 632)
  d. Integrated Healthcare Systems (MGS 634)
  e. Introduction to Research Methods (MGG 700)
  f. Doctoral Seminar on Extreme Events (MSS 788)
  g. Doctoral Seminar on Information Assurance (MSS 787)
  h. Enterprise Models (HP Students – Joint UB-Amrita MS Program in Bangalore, Inida and MGS 601)
  i. Database Management Systems (MGS 613)
  j. Technology Management and E-Business (MGS 607)
  k. Global Information Infrastructure Technology Management (MGS 602)

Undergraduate

  a. UB Seminar in Corporate and Individual Social Responsibility (Recitation) (MGG 199)
  b. Telecommunications Technology (MGS 402)
  c. Database Management Systems (MGS 404)
  d. Systems, Analysis and Design (MGS 405)

Other Institutions (Graduate and Undergraduate):

  a. Enterprise Integration
  b. Data Warehousing and Data Mining
  c. Database Design and Management
  d. Database Administration
  e. Advanced MIS
  f. Object Oriented Programming and C++
  g. Systems, Analysis and Design
  h. C programming
  i. COBOL programming
  j. Production Management

Guided the following Independent Advanced Topics Courses at the MBA level

  a. Accountable Care Orgainizations
  b. Distributed Denial of Service
  c. E-Commerce Infrastructure Technologies and Integration
  d. E-Commerce Infrastructure- Strategies for Store Front Software
  e. Content Management for Global E-Commerce
  f. Web Mining for E-Commerce

g. E-Commerce – Content Management
h. Knowledge Management for Hospital Emergency Rooms
i. Data Mining – Memory and Case-based Reasoning

Professional Service

School

Director of MS in MIS program, 2005-present

- Championed structural changes and revisions of curriculum.
- Recruited industry faculty to teach within the program.
- Developed the program from its infancy to making it a prestigious program with significant demand.
- Devised marketing campaigns to increase enrollment (no. of students):

2005: 11	2006: 22	2007: 34	2008: 44
2009: 29	2010: 44	2011: 72	2012: 92
2013: 89	2014: 92	2015:122	2016:127

- Mentored over 350 MS in MIS students. Also served as their adviser.

Ph.D. Faculty Advisor, Department of Management Science and Systems, 2005-present.

Member

i. Ph.D. Program Committee, 2005-2016
ii. MBA Curriculum Committee for Bioinformatics Option, 2003-2005
iii. MIS faculty Committee, 2002-present.

University

Grant Review Panel: Invited to the IRDF Grant Review Panel (June 2007)

Other Contributions:

- School of Management Representative, UB202 Extreme Events Committee: 2005-
- Actively participated in the Center of Academic Excellence in Information Systems Assurance, Research and Education (CEISARE@Buffalo)

Professional Activities in the Information Systems Community

Advisory Board

Annual Symposium for Information Assurance, Albany, New York (2007-present)

Program Co-Chair

- Workshop on Information Technology and Systems, Milan, Italy 2013 (**WITS 2013**).
- Associate Editor, IS in Healthcare, International Conference of Information Systems, Seoul Korea, December, 2017.
- Associate Editor, Information Assurance Track, International Conference of Information Systems, Seoul Korea, December, 2017.
- Workshop on Electronic Business (**WEB'09**), Phoenix, Arizona, December 2009.
- 5th International Conference on Information Systems Technology and Management (**CISTM**), July 16-18, Hyderabad, India, 2007.

Associate Editor / Editorial Board

- Associate Editor, IS in Healthcare, International Conference of Information Systems, Seoul Korea, December, 2017.
- Associate Editor, Information Assurance Track, International Conference of Information Systems, Seoul Korea, December, 2017.
- Guest Associate Editor, **MISQ**, 2013, 2015, 2017-18
- Editorial Board, Journal of the AIS (**JAIS**), 2013- 2015
- Department Editor and Associate Editor, Communications of the AIS (**CAIS**), 2011-2016.
- Journal of Information Systems Security (**JISEC**), 2005-present.
- Newsletter Editor: INFORMS College on Artificial Intelligence, 2007- present
- International Conference on Information Systems (**ICIS**): 2005, 2007. Information Security Track, 2017.

Founding Member and Secretary: Association of Information Systems, SIG-Ontology Driven Information Systems, 2004. Executive member 2004-2012.

Track Chair: Information Systems Security, AMCIS 2008., International Conference on Information Systems (ICIS) 2018.

Mini-Track Chair

- Mini-Track Chair, IT Governance, Risk and Compliance nn Context of Security And Privacy, ", 26th Americas Conference on Information Systems (AMCIS), Salt Lake City, Utah August 2020 (Held virtually).

- Mini-Track Chair, Healthcare Analytics, 26th Americas Conference on Information Systems (AMCIS), Salt Lake City, Utah August 2020 (Held virtually).
- Mini-Track Chair, Virtual Communities for Healthcare, 26th Americas Conference on Information Systems (AMCIS), Salt Lake City, Utah August 2020 (Held virtually).
- Mini-Track Chair, IT Governance, Risk and Compliance nn Context of Security And Privacy, 25th Americas Conference on Information Systems (AMCIS), Cancún, Mexico, August 2019.
- Mini-Track Chair, Healthcare Analytics, 25th Americas Conference on Information Systems (AMCIS), Cancún, Mexico, August 2019.
- Mini-Track Chair, Virtual Communities for Healthcare, 26th Americas Conference on Information Systems (AMCIS), Cancún, Mexico, August 2019.
- Mini-Track Chair, IT Governance, Risk and Compliance in Security And Privacy, 24rd Americas Conference on Information Systems (AMCIS), New Orleans, Louisiana, August 2018
- Mini-Track Chair, Healthcare Analytics, ", 24rd Americas Conference on Information Systems (AMCIS), New Orleans, Louisiana, August 2018
- Workshop on E-Business (WEB): 2005, 2006, 2007, 2008, and 2009 "Information Systems Security."
- Americas Conference on Information Systems (AMCIS): 2004, 2005, 2006, and 2007, 2008: "Socio-Technical Aspects in Information Systems Security".
- Hawaii International Conference on System Sciences (HICSS): 2004, 2005, 2006 and 2007, "Information Systems Security."

Local-Arrangements Chair: Workshop on E-Business (WEB): 2006, 2007, 2008 and 2009.

Session Chair on Extreme Events, Cyber security Workshop, Buffalo, 2008, 2009, 2010.

Session Chair: Web 2016.

Program Committee Member

- Annual Symposium on Information Assurance (ASIA) 2008-present).
- Pacific Asia Workshop on Intelligence and Security Informatics (PAISI) 2006 and 2007, 2008, 2009.
- Workshop on Intelligence and Security Informatics (WISI) 2006.
- IEEE International Conference on Intelligence and Security 2005 and 2006.
- Secure Knowledge Management Workshop 2004 and 2006.
- Information Resources Management Association (IRMA) 2003.
- Workshop on E-Business, 2004-present
- Workshop on Information Systems Technology (WITS) 2002, 2012, 2014, 2015.

Professional Societies:

1. Association for Information Systems (AIS)
2. The Institute of Operations Research and Management Sciences (INFORMS)
3. Decision Sciences Institute

<u>Reviewer</u>: Management Science, MISQ, EJOR, JAIS, CAIS, JMIS, ISR, IEEE TKDE, DSS, JISSEC, ICIS, WITS, AMCIS, HICSS, Journal of Disaster Studies.

Organized Workshop (with Dr. Shambhu Upadhyaya and Dr. H. R. Rao) on Secure Knowledgement Managemnt. 200 participants. Supported by NSF and AFRL, September 2004.

Organized One-Day Departmental Research Workshop on Information Assurance, 2004, 2005 and 2006. Funded through the School of Management: Small Grants Program.

Professional Experience

August 2016 –   Professor
Present   State University of New York, Buffalo, New York

August 2008 –   Associate Professor
2016   State University of New York, Buffalo, New York

August 2002 - Assistant Professor
July 2008   State University of New York, Buffalo, New York

August 1999 - Assistant Professor and Seinsheimer Faculty Fellow
July 2002   A.B. Freeman School of Business, Tulane University

August 1998 - Visiting Assistant Professor
July 1999   A.B. Freeman School of Business, Tulane University

June 1998 -   Visiting Scientist (During summer and winter breaks)
January 1999   NEC Reseach Institute, Princeton, New Jersey
                 Research in Image Registration – Summer and in January (between semesters)

July 1996 -   Instructor
July 1998   Ourso College of Business, Louisana State University
                 Department of Computer Science, Louisana State University

1989 - 1996   Full Time Manager III
               School of Veterinary Medicine and Veterinary Teaching Hospital
               Managed the Hospital Information System and assisted faculty in Bioinformatics.

1988-1988   Applications Specialist
               Moore Governmental Systems, Baton Rouge, Louisiana
               Designed and developed ERP software for non-profit governmental agenicies.
               Accounting Modules and Customer Information Systems for Utilities.

1987-1988   Programmer Analyst
               Digital Business Computers, Baton Rouge, Louisiana
               Customized ERP packages. Some of the subsystems I was dealing with were:
                       General Ledger Subsystem
                       Accounts Receivable Subsystem
                       Accounts Payable Subsystem
                       Inventory Control Subsystem
                       Customer Order Processing Subsystem

July 1983 -   Executive to the General Manager
January 1984   WIMCO, LTD, INDIA
               Assisted in capacity planning, new plant setup, market analysis and analysis of
               export and import rules, regulations, tariffs and restrictions for packaging
               machinery. Helped setup of technical data for the legislatures to influence import
               and export laws on behalf of my supervisor. Analysis of production data for the
               General Manager of the Packaging Machinery division. Distribution of goods
               and customer liaison.

July 1980 –   Engineer
July 1981   Mukund Iron and Steel Company

Other Educational Qualifications

Certifications and Professional Course Completions

Symposium on "Discussion Leadership Skills Workshop" by Louis B. Barnes, 2003.
SAP Basis Administration (SAP 310) SAP America, 1999.
SAP Business Processes (WB 100.) SAP America, 1999.
SAP Implementation Project Management – Cross Application SAP America, 1999.
SAP Introduction to ABAP Programming (BC 400) SAP America, 1999.
SAP ABAP Dictionalry Objects (BC 425.) SAP America, 1999.
SAP Business Information Warehouse I (BW 205) SAP America 1999.
SAP Business Information Warehouse II (BW 210) SAP America 1999.
SAP Basis Technology Courses (SAP/50) SAP America, 1998.
Short Course on Wavelets, by Gilbert Strang and Thuong Nguyen, Univ. of South Florida,
    1996.
Workshop on the Mathematics and Physics of Wavelets, by Gerald Kaiser, Washington D.C.,
    1996.
Wavelets in Communication Systems, by Robert Orr and P. P. Gandhi, IEEE International
    Conference on Communications, Dallas, Texas, 1996.
Distributed Files Systems, USENIX, San Antonio, 1993
Unix Network Programming, by Richard Stevens at USENIX, Nashville, Tennessee, 1992
Unix Internals, by Uresh Vahalia, USENIX, Dallas, 1991
Network Management, DECUS, New Orleans, 1991.