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Rohit Valecha

Associate Professor Information Systems and Cyber Security University of Texas at San Antonio

EDUCATIONAL BACKGROUND

University at Buffalo, The State University of New York

Ph.D., Management Information Systems	2010 - 2015
"Information and Communication in 'Mediated' Emergency Response	Context"
M.S., Computer Science	2009 - 2010
B.S., Electrical Engineering	2005 - 2009

PROFESSIONAL EMPLOYMENT HISTORY

Associate Professor – Early Tenure (Info Systems & Cyber Security)	2021 – Present
University of Texas at San Antonio	
Assistant Professor (Information Systems & Cyber Security)	2016 - 2021
University of Texas at San Antonio	
Assistant Professor (Business Intelligence & Analytics)	2015 - 2016
Middle Tennessee State University	
	2012 2015
Senior Software Architect, Aurora Consulting Group, East Aurora, NY	2013 - 2015
IT Architect, International Admissions, University at Buffalo, NY	2010 - 2013
Software Developer, Erie County State Department, Buffalo, NY	2009 - 2010

AWARDS AND HONORS

- 1. **Provost's Cloud Technology Endowed Fellowship** for September 2022-August 2023. \$16,000.
- 2. **Dean's Distinguished Research Award** for "A Socio-Emotional Perspective of the OPM Data Breach: An Investigation of Public Reaction on Twitter". *Management Information Systems Quarterly (MISQ)*. Summer 2022. \$10,000.
- 3. **Dean's Distinguished Research Award** for "Phishing Email Detection using Persuasion Cues". *IEEE Transactions on Dependable and Secure Computing (IEEE TDSC)*. Summer 2022. \$10,000.

- 4. **Outstanding Doctoral Student Paper Award** for "User Engagement and Uncertainty from COVID-19 Misinformation on Social Media: An Examination of Emotions and Harms" (with doctoral students Thi Tran and Pranali Mandaokar). *Workshop on Information Security and Privacy (WISP) 2021*. Austin, Texas. December 2021.
- 5. **Dean's Distinguished Research Award** for "Influence in Social Media: An Investigation of Tweets Spanning the 2011 Egyptian Social Movement". *Management Information Systems Quarterly (MISQ)*. Summer 2021. \$10,000.
- 6. **Best Paper Award** for "A Prediction Model of Privacy Control for Online Social Networking Users". *Design Science Research on Information Systems and Technology (DESRIST)* 2018. Chennai, India. June 2018.
- 7. **Best Paper Award** for "Modeling Public Response to Data Breaches". *American Conference on Information Systems (AMCIS)* 2017. Boston, Massachusetts. August 2017.
- 8. **Ph. D. Student Achievement Award** for "Information and Communication in 'Mediated' Crisis Response". University at Buffalo, Buffalo, NY. May 2016.
- 9. **Best Poster Award** and **Best Research Video Award** (third place) for "Collaborative Information Processing in Crisis Situations: A Study of 2010 Haiti Earthquake". *Conference on Information Systems and Technology (CIST) 2014*. San Francisco, California. November 2014.
- 10. **Best Prototype/Demo Award Nominee** for "A Prototype of a Patient Safety Knowledge Management System (PSKMS)". *Institute for Operations Research and the Management Sciences (INFORMS)* 2012. Orlando, Florida. December 2012.
- 11. **Best Prototype/Demo Award Nominee** for "A Prototype of a Local Emergency Response System based on Multi-Agent Conceptual Modeling Language". *Workshop on Information Technology and Systems (WITS) 2012*. Orlando, Florida. December 2012.
- 12. **Best Paper Award** (third place) for "Messaging Model for Emergency Communication". *Midwest Association on Information Systems (MWAIS) 2012*. Green Bay, Wisconsin. May 2012.
- 13. **Best Prototype/Demo Award** for "A Prototype of a Fire-Related Extreme EventZ System (FREEZ)". *Workshop on Information Technology and Systems (WITS) 2010*. St. Louis, Missouri. December 2010.

INVITED TALKS AND PRESENTATIONS

1. Misinformation in the Context of COVID-19 Pandemic: An Investigation of Harm Characteristics and related Social Media Conversations. *University of Texas at Rio Grande Valley*. November 2021.

2. An Investigation of Crowdsourced Crisis Mapping Messages in the context of the 2010 Haiti Earthquake. *NSF Convergence Workshop on Crowdsourcing*. May 2018.

RESEARCH MENTIONS IN NEWS AND EDITORIALS

- Data Breach Fatigue Makes Every Day Feel Like Groundhog Day https://securityintelligence.com/data-breach-fatigue-makes-every-day-feel-like-groundhogday/
- 2. Breach Fatigue and the Changing Face of Crisis Communications http://www.hkstrategies.com/global/en/breach-fatigue-changing-face-crisis-communications/
- 3. Combating Data Breach Fatigue https://www.sciencedaily.com/releases/2018/01/180123113024.htm https://phys.org/news/2018-01-combating-breach-fatigue.html
- 4. Leidner, D. E. (2020) "Editorial Reflections: Lockdowns, Slow Downs, and Some Introductions". *Journal of the Association for Information Systems* (JAIS). Vol. 21: Iss. 2, Article 10. DOI: 10.17705/1jais.00600 https://aisel.aisnet.org/jais/vol21/iss2/10

GRANT PROPOSALS AWARDED

- 1. Co-PI on *NSF DRMS-DDRIG Grant:* COVID Vaccine Misinformation Harms: An Investigation of Harm Perceptions and Related Harm Communications on Social Media with H. Raghav Rao (PI) and Thi Tran. \$29,850.
- 2. Co-PI on *NSF SCC-PG Grant:* Building Resilience during Disasters through Digital Inclusion of Older Adults: A Smart and Connected Community Research Initiative with H. Raghav Rao (PI), Bijo Mathew, Chris Reddick and David Han. \$150,000.
- 3. Co-PI on *DHS Scientific Leadership Award*: Analysis and Training for the Defense of Biological and Digital Threats with Bernard Arulanandam (PI), Nicole Beebe, Rajendra Boppana, Mark Eppinger, Xiaoyin Wang and Palden Lama. \$895,237.
- 4. Co-PI on *NSF EAGER Grant*: An Investigation of the Propagation of Error-Resistant and Error-Prone Messages Over Large-Scale Information Networks with H. Raghav Rao (PI), Varun Chandola and Manish Agrawal. \$215,999.
- 5. Co-PI on *NSF RAPID Grant*: Employees' Response to OPM Data Breaches: Decision Making in the Context of Anxiety and Fatigue with H. Raghav Rao (PI) and Rui Chen (PI). \$100,001.

ACCEPTED JOURNAL ARTICLES

- 1. Bachura, E., Valecha, R., Chen, R., Rao, R. H. (2022). A Socio-Emotional Perspective of the OPM Data Breach: An Investigation of Public Reaction on Twitter. *Management Information Systems Quarterly (MISQ)*, 46 (2), 881-910.
- 2. Bhatt, P., Vemprala, N., Valecha, R., Hariharan, G., Rao, H. R. (2022). User Privacy, Surveillance, and Public Health during COVID-19 An Examination of Twitterverse. *Information Systems Frontiers (ISF)*, 1-16, doi: 10.1007/s10796-022-10247-8.
- 3. Tran, T., Valecha, R., Rao, H. R. (2022). Perceptions of Misinformation Harm: The Effect of Corrective Actions in the Context of COVID 19 Pandemic. *AIS Transactions on Human-Computer Interaction (THCI)*, 14 (2) 185-206, doi: 10.17705/1thci.0010166.
- 4. Mukherjee, P., Parameswaran, S., Valecha, R. (2022). I Like my Anonymity: An Empirical Investigation of the Role of Multidimensional Review Text and Anonymity on Helpfulness of Employer Reviews. *Information Systems Frontiers (ISF)*, 1-18, doi: 10.1007/s10796-022-10268-3.
- 5. Venkatesan, S., Valecha, R., Yaraghi, N., Oh, O., Rao, H. R. (**2021**). Influence in Social media: An Investigation of Tweets Spanning the 2011 Egyptian Social Movement. *Management Information Systems Quarterly (MISQ)*, 45 (4), 1679-1714, doi: 10.25300/MISQ/2021/15297.
- 6. Valecha, R., Rao, H. R., Upadhyaya, S. (2021). An Activity Theory Approach to Leak Detection and Mitigation in Patient Health Information (PHI). *Journal of the Association for Information Systems (JAIS)*, 22 (4), 6, doi: 10.17705/1jais.00687.
- 7. Valecha, R., Mandaokar, P., Rao, H. R. (2021). Phishing Email Detection using Persuasion Cues. *IEEE Transactions on Dependable and Secure Computing (IEEE TDSC)*, 19 (2) 747-756, doi: 10.1109/TDSC.2021.3118931.
- 8. Votto, A., Valecha, R., Rad, P., Rao, H. R. (2021). Artificial Intelligence in Tactical Human Resource Management: A Systematic Literature Review. *International Journal of Information Management (IJIM) Data Insights*, 1 (2), 100047.
- 9. Vemprala, N., Bhatt, P., Valecha, R., Rao, H. R. (2021). Emotions during the COVID-19 Crisis: A Health vs. Economy Analysis of Public Responses. *American Behavioral Scientist* (ABS), 65 (14), 1972-1989, doi: 10.1177/00027642211050901/ID: ABS-21-0123.
- 10. Valecha, R., Srinivasan. S. K., Volety, T., Agrawal, M., Rao, H. R. (2021). Fake News Sharing: An Investigation of Threat and Coping Responses in the Context of Zika Virus. *ACM Digital Threats: Research and Practice (ACM DTRAP)*, 2 (2), 1-16.

- 11. Aivazpour, Z., Valecha, R., Chakraborty, R. (2021). Data Breaches: An Empirical Study of the Effect of Monitoring Services. *The Data Base for Advances in Information Systems* (DBAIS), 1-29.
- 12. Rao, H. R., Vemprala, N., Akello, P., Valecha, R. (2020). Retweets of Officials' Alarming vs Reassuring Messages during the COVID-19 Pandemic: Implications for Crisis Management. *International Journal of Information Management (IJIM)*, 55, 102187.
- 13. Akanfe, O., Valecha, R., Rao, H. R. (2020). Design of an Inclusive Financial Privacy Index (INF-PIE): A Digital Financial Inclusion and Financial Privacy Perspective. *ACM Transactions on Management Information Systems (ACM TMIS)*, 12 (1), 1-21.
- 14. Akanfe, O., Valecha, R., Rao, H. R. (2020). Design of a Compliance Index for Privacy Policies: A Study of Mobile Wallet and Remittance Services. *IEEE Transactions on Engineering Management (IEEE TEM)*, doi: 10.1109/TEM.2020.3015222.
- 15. Akanfe, O., Valecha, R., Rao, H. R. (2020). Country-Level Risks Assessment: An Exploratory Study of Privacy Compliance of Mobile Wallet and Remittance Apps. *Computers and Security (C&S)*, 99, 102065.
- 16. Valecha, R., Volety, T., Kwon, H., Rao, H. R. (2020). Misinformation Sharing during Zika: An Investigation of the Effect of Threat and Distance. *IEEE Internet Computing (IEEE IC)*, 25 (1), 31-39, doi: 10.1109/MIC.2020.3044543.
- 17. Tran, T., Valecha, R., Rad, P., Rao, H. R. (**2020**). An Investigation of Misinformation Harms related to Social Media during Humanitarian Crises. *Information Systems Frontiers (ISF)*, 1-9. doi: 10.1007/s10796-020-10088-3
- 18. Tran, T., Valecha, R., Rad, P., Rao, H. R. (2020). Misinformation Harms: A Tale of Two Humanitarian Crises. *IEEE Transactions on Professional Communication (IEEE TPC)*, 63 (4), 386-399, doi: 10.1109/TPC.2020.3029685.
- 19. Valecha, R., Rao, H. R., Upadhyaya, S., Sharman, R. (**2019**). An Activity Theory Approach to Modeling Dispatch-Mediated Emergency Response Communications. *Journal of the Association for Information Systems (JAIS)*, 20(1), 2, doi: 10.17705/1jais.00600.
- 20. Valecha, R. (**2019**). An Investigation of Interaction Patterns in Emergency Management: A Case Study of the Crash of Continental Flight 3407. *Information Systems Frontiers (ISF)*, 1-13.
- 21. Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S. (2013). A Dispatch-Mediated Communication Model for Emergency Response Systems. *ACM Transactions on Management Information Systems (ACM TMIS)*, 4(1), 2.

WHITE PAPERS

1. Valecha, R., Lee, J., Rao, H. R. (**2014**). Privacy Issues in Healthcare. *The Networking and Information Technology Research and Development (NITRD)*. White Paper. (https://www.nitrd.gov/cybersecurity/nprsrfi102014/Valecha_Lee_Rao.pdf)

CONFERENCE PUBLICATIONS

- 1. Bhatt, P., Valecha, R., Rao, H. R. (2022). An Investigation of Public Reaction to COVID-19-related Data Breaches in Twitterverse. *Workshop on Information Systems Security Research (IFIP)* 2022. Denver, Colorado.
- 2. Kurumathur, S., Bhatt, P., Valecha, R., Rao, H. R. (2022). Examining Public Response to Vigilantism: A Multi-dimensional Model of Social Media Discourse. *International Conference on Information Systems (ICIS)* 2022. Copenhagen, Denmark.
- 3. Tran, T., Mandaokar, P., Vemprala, N., Valecha, R., Hariharan, G., Rao, H. R. (2021). User Engagement and Uncertainty from COVID-19 Misinformation on Social Media: An Examination of Emotions and Harms. *Workshop on Information Security and Privacy* (WISP) 2021. Austin, Texas.
- 4. Osborn, S., Rao, H. R., Hariharan, G., Mathew, B., Enriquez, R., Valecha, R., Han, D., Reddick, C. (2021). Community Investment in the Digital Divide Pays Dividends for Years to Come. *Workshop on ICTs in Global Development (SIG GlobDev) 2021*. Austin, Texas.
- 5. Bhatt, P., Vemprala, N., Valecha, R., Hariharan, G., Rao, H. R. (2021). Emotions in User Privacy Discussions on Social Media During the COVID-19 Crisis. *International Conference on Secure Knowledge Management (SKM) 2021 Virtual Conference*.
- 6. Tran, T., Valecha, R., Han, D., Rao, H. R. (2021). The Role of Trust and Risk Tolerance on Perceived Psychological Harms from COVID-19 Vaccine Misinformation. *Workshop on Information Systems Security Research (IFIP) 2021*. San Antonio, Texas.
- 7. Tran, T., Mandaokar, P., Vemprala, N., Valecha, R., Rao, H. R. (2021). Conversational Uncertainty from Misinformation in Social Media during COVID-19: An Examination of Emotions. *In Informed Democracy & Social Cybersecurity (IDeaS) 2021 Virtual Conference*.
- 8. Fang, B., Parameswaran, S., Valecha, R. (2021). All about My Employer The Effects of Job Seeker Characteristics and Job Attributes on Electronic Staff Word of Mouth Helpfulness. *ACM Special Interest Group on Management Information Systems (SIGMIS) Computers and People Research (CPR)* 2021 Conference.
- 9. Tran, T., Valecha, R., Rao, H. R. (2020). False Claims Hurt: Examining Perceptions of Misinformation Harms during Black Lives Matter Movement. *In Informed Democracy & Social Cybersecurity (IDeaS) 2020 Virtual Conference*.

- 10. Bhatt, P., Vemprala, N., Valecha, R., Hariharan, G., Rao, H. R. (**2020**). User privacy and public health during COVID-19 An examination of Twitterverse. *Workshop on Bright Internet Global Summit (BIGS) 2020 Virtual Conference*.
- 11. Tran, T., Valecha, R., Najafirad, P., Rao, H. R. (**2020**). Misinformation in Crises: A Conceptual Framework for Examining Human-Machine Interactions. *In IEEE / ITU International Conference on Artificial Intelligence for Good (AI4G) 2020 Virtual Conference*.
- 12. Mukherjee, P., Parameswaran, S., Valecha, R. (2020). Investigating the Effect of Multidimensional Review Text and Anonymity on Review Helpfulness: Empirical Investigation in the Context of Employer Review Sites. *Hawaii International Conference on System Sciences (HICSS)* 2020. Hawaii.
- 13. Vemprala, N., Bhatt, P., Valecha, R., Rao, H. R. (2020). Lives vs. Livelihood: User Privacy during COVID-19 Pandemic. *Workshop on Information Systems Security Research (IFIP)* 2020. Des Moines, Iowa.
- 14. Marshall, J., Parameswaran, S., Valecha, R. (2020). Rating Deviation in an Electronic Staff Word of Mouth Context: An Exploration of Implicit Motives. *Southern Management Association (SMA)* 2020. St. Pete Beach, Florida.
- 15. Vemprala, N., Akello, P., Valecha, R., Rao, H. R. (2020). An Exploratory Analysis of Alarming and Reassuring Messages in Twitterverse during the COVID-19 Epidemic. *American Conference on Information Systems (AMCIS)* 2020. Salt Lake City, Utah.
- 16. Valecha, R., Srinivasan. S. K., Volety, T., Kwon, K. H., Agrawal, M., Rao, H. R. (2019). Cyber-rumor Sharing: An Investigation of Threat and Coping Responses. *Workshop on Bright Internet Global Summit (BIGS) 2019*. Munich, Germany.
- 17. Valecha, R., Volety, T., Kwon, H., Rao, H. R. (2019). The Effect of Threat and Proximity on Cyber-Rumor Sharing. *International Conference on Secure Knowledge Management (SKM)* 2019. Goa, India.
- 18. Tran, T., Valecha, R., Najafirad, P., Rao, H. R. (2019). Taxonomy of (Mis)information Harms from Social Media in Humanitarian Crises. *International Conference on Secure Knowledge Management (SKM) 2019*. Goa, India.
- 19. Tran, T., Valecha, R., Rad, P., & Rao, H. R. (2019). Misinformation Harms During Crises: When The Human and Machine Loops Interact. *In 2019 IEEE International Conference on Big Data pp. 4644-4646. IEEE.* Los Angeles, California.
- 20. Akanfe, O., Valecha, R., Rao, H. R. (2019). GDPR Fitness Assessment for Digital Payment Systems' (DPS) Privacy Policies: A Study of Mobile Wallet and Remittance Services. *Workshop on Information Systems Security Research (IFIP) 2019.* Bossier City, Louisiana.

- 21. Valecha, R., Gonzales, A., Mock, J., Golob, E., Rao, H. R. (2019). Investigating Phishing Susceptibility An Analysis of Neural Measures. *NeurolS Retreat* 2019. Vienna, Austria.
- 22. Tran, T., Valecha, R., Najafirad, P., Rao, H. R. (2019). Taxonomy of Misinformation Harms from Social Media in Humanitarian Crises. *American Conference on Information Systems* (AMCIS) 2019. Cancun, Mexico.
- 23. Aivazpour, Z., Valecha, R., Chakraborty, R. (2018). The Impact of Data Breach Severity on Post-Breach Online Shopping Intention. *International Conference on Information Systems* (*ICIS*) 2018. San Francisco, California.
- 24. Valecha, R., Chakraborty, R., Rao, H. R., Upadhyaya, S. (2018). A Prediction Model of Privacy Control for Online Social Networking Users. *Design Science Research on Information Systems and Technology (DESRIST)* 2018. Chennai, India.
- 25. Valecha, R., Volety, T., Vemprala, N., Kwon, H., Rao, H. R. (2018). Cyber-rumor Sharing: The Case of Zika Virus. *American Conference on Information Systems (AMCIS)* 2018. New Orleans, Louisiana.
- 26. Bachura, E., Valecha, R., Chen, R., Rao, R. H. (2017). Data Breaches and the Individual: An Exploratory Study of the OPM Hack. *International Conference on Information Systems* (*ICIS*) 2017. Seoul, South Korea.
- 27. Valecha, R., Volety, T., Vemprala, N., Kwon, H., Rao, H. R. (2017). An Investigation of Cyber-rumor Sharing: The Case of Zika Virus. *Workshop on Bright Internet and Global Trust Building (BIG) 2017*. Seoul, South Korea.
- 28. Shu, J. S., Valecha, R., Rao, H. R. (**2017**). Contributing to the Wikipedia Ransomware Knowledge Base through Hacker-forums Analyses. *Workshop on Information Security and Privacy (WISP) 2017*. Seoul, South Korea.
- 29. Ebadi, N., Mehra, R., Valecha, R., Rad, P., Rao, H. R. (2017). Fake News Detection in Crisis Microblogs. *Workshop on Secure Knowledge Management (SKM) 2017*. Tampa, Florida.
- 30. Valecha, R., Chen, R., Herath, T., Wang, J., Rao, H. R. (2017). A Multi-level Model of Phishing Email Detection. *Workshop on Information Systems Security Research (IFIP) 2017*. Tampa, Florida.
- 31. Bachura, E., Valecha, R., Chen, R., Rao, R. H. (2017). Modeling Public Response to Data Breaches. *American Conference on Information Systems (AMCIS)* 2017. Boston, Massachusetts.
- 32. Aivazpour, Z., Valecha, R., Rao, R. H. (2017). Unpacking Privacy Paradox: A Dual Process Theory Approach. *American Conference on Information Systems (AMCIS)* 2017. Boston, Massachusetts.

- 33. Valecha, R., Bachura, E., Chen, R., Rao, H. R. (**2016**). An Exploration of Public Reaction to the OPM Data Breach Notifications. *Workshop on E-business (WEB) 2016*. Dublin, Ireland.
- 34. Valecha, R., Chen, R., Herath, T., Vishwanath, A., Wang, J., Rao, H. R. (2016). Reward-based and Risk-based Persuasion in Phishing Emails. *Workshop on Information Systems Security Research (IFIP) 2016*. Albuquerque, New Mexico.
- 35. Chen, R., Rao, H. R., Valecha, R. (2016). Response to the Office of Personnel Management Data Breaches: A Conceptual Exploration. *American Conference on Information Systems* (AMCIS) 2016. San Diego, California.
- 36. Valecha, R., Chen, R., Herath, T., Vishwanath, A., Wang, J., Rao, H. R. (2015). An Exploration of Phishing Information Sharing: A Heuristic-Systematic Approach. *Workshop on Information Security and Privacy (WISP) 2015*. Fort Worth, Texas.
- 37. Valecha, R., Chen, R., Herath, T., Vishwanath, A., Wang, J., Rao, H. R. (2015). An Exploration of Language Acts of Persuasion in Phishing Emails. *Workshop on Information Systems Security Research (IFIP) 2015*. Newark, Delaware.
- 38. Valecha, R., Rao, H. R., Upadhyaya, S. (2014). Privacy Engineering: A Health Privacy Model. *Workshop on Information Security and Privacy (WISP) 2014*. Auckland, New Zealand.
- 39. Valecha, R., Kashyap, M., Rajeev, S., Rao, H. R., Upadhyaya, S. (2014). An Activity Theory Approach to Specification of Access Control Policies in Transitive Health Workflows. *International Conference on Information Systems (ICIS)* 2014. Auckland, New Zealand.
- 40. Valecha, R., Sultania, A., Chandola, V., Agrawal, M., Rao, H. R. (**2014**). A Big Data Approach to Rumor Mitigation in Twitter Microblog: A Case of Boston Bombings. *Workshop on E-business (WEB) 2014*. Auckland, New Zealand.
- 41. Valecha, R., Oh, O., Rao, H. R. (2014). Collaborative Information Processing in Crisis Situations: A Study of the 2010 Haiti Earthquake. *Conference on Information Systems and Technology (CIST)* 2014. San Francisco, California.
- 42. Han, W., Valecha, R., Sharman, R. (2013). Impact of Security and Privacy Concerns among Medicare Patients on Sharing Health Information Online. *In 8th Annual Symposium on Information Assurance (ASIA) 2013*. Albany, New York.
- 43. Valecha, R., Oh, O., Rao, H. R. (2013). An Exploration of Collaboration over Time in Collective Crisis Response during the Haiti 2010 Earthquake. *International Conference on Information Systems (ICIS) 2013*. Milan, Italy.
- 44. Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S. (2013). Collaboration Patterns in Local Emergency Communications: A "Gated" Language Action Perspective. *Design Science Research on Information Systems and Technology (DESRIST) 2013*. Helsinki, Finland.

- 45. Valecha, R., Upadhyaya, S. Rao, H.R., Keepanasseril, A. (2012). An Activity Theory Approach to Leak Detection and Mitigation in Personal Health Information (PHI). *Workshop on Information Security & Privacy (WISP) 2012*. Orlando, Florida.
- 46. Valecha, R., Sudumbrekar, K., Sharman, R. (**2012**). Grammar for Agent-Based Emergency Response Systems. *Workshop on E-Business (WEB) 2012*. Orlando, Florida
- 47. Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S. (**2012**). Design Principles for Emergency Collaborative Systems: A Situation Awareness Study of Buffalo Plane Crash. *American Conference on Information Systems (AMCIS) 2012*. Seattle, Washington.
- 48. Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S. (**2012**). Messaging Model for Emergency Communication. *Midwest Association on Information Systems (MWAIS) 2012*. Green Bay, Wisconsin.
- 49. Valecha, R., Sharman, R., Rao, H. R., Upadhyaya, S. (2012). Emergency Response System Design: An Examination of Emergency Communication Messages. *Design Science Research on Information Systems and Technology (DESRIST) 2012*. Las Vegas, Nevada.

TEACHING COURSEWORK

1. <u>IS 7033</u>: Design Science Research in Information Systems (doctoral course) – Fall 2022 (Designed and Developed)

This is a doctoral research seminar that provides an introduction to Design Science Research (DSR). It focuses on planning and conducting design science research at the Ph.D. level. This course consists of:

- a. Understanding design research problem and research questions
- b. Discussing artefact(s) requirements and their sources of data
- c. Purposefully design and evaluate artefact(s) focusing on the core topics of Design Science methodology design paradigm, design process, design theory, problem analysis and requirements specification, artefact evaluation
- 2. QNRM: Quantitative Research Methods (doctoral course) Spring 2022 (Designed and Developed)

This is a doctoral research seminar that provides an exposure to various empirical methods that enables researchers to conduct quality research. This course comprises of:

- a. Transform interesting issues in management research into researchable problems
- b. Understanding and applying multivariate data analysis methods
- c. Reporting research findings and publishing in peer-reviewed journals
- 3. <u>IS 5143: Information Technology (grad course) Spring 2017, Spring 2018 (Designed and Developed)</u>

This is a hands-on course exploring the technologies and business principles used in a state-of-the-art IT infrastructure. This course comprises of:

- a. Technologies used in enterprise IT systems
- b. Business aspects of an IT infrastructure
- c. Nuances of user interface design, both technical and aesthetic
- d. Group processes to achieve IT project success

4. <u>IS 6343: Secure Network Design (grad course) – Spring 2017, Spring 2018, Fall 2020, Spring 2022, Summer 2022</u>

This is a hands-on course associated with modern network security threats and the tools and techniques for defending resources against those threats. This course comprises of:

- a. Network security threats
- b. Efficacy of various defensive measures in relation to those threats
- c. Infrastructure components, such as firewalls, as appropriate to provide a secure system infrastructure for data communication
 - d. Basic processes of intrusion detection and incident response

5. <u>IS 3423: Network Security (undergrad course) – Fall 2016, Fall 2017, Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022</u>

This is a hands-on course dealing with creating and managing secure networks. This course comprises of:

- a. Basic cryptography and secure networking protocols
- b. Logical and physical security management devices
- c. Operational and implementation issues of security devices

6. <u>IS 4953: Special Studies: Pathogenic Outbreak Investigations (undergrad course) – Fall 2016, Fall 2018 (Designed and Developed)</u>

This course deals with propagation, attribution, detection, and analysis of digital pathogens. This course comprises of:

- a. Techniques for identification of phylogeny through behavioral analytics
- b. Basics of reverse software engineering
- c. Current databases of malicious code information
- d. Social insect coordination models/digital immune systems models

7. BIA 6905: Applied Business Analytics (grad course) – Fall 2015, Spring 2016 (Designed and Developed)

This is a hands-on course dealing with importing, aggregating, visualizing and reporting data using various Power BI tools. This course comprises of:

- a. Data Handling in Excel and Tableau
- b. Data Analysis using Power Pivots
- c. Data Visualization using Power Views

8. INFS 3400: Object-Oriented Programming (undergrad course) – Fall 2015, Spring 2016

This is a hands-on C#.NET programming class suited for developing component-based applications. This course introduces programming logic and problem solving in design, construction and implementation of business applications. The major objectives of this course include:

a. C# Syntax and Constructs

- b. Object-Oriented Programming
- c. Windows Graphical User Interface
- d. Application Development and Deployment

9. MGS 602: Global IT Infrastructure Management (grad course) – Fall 2014

This is a hands-on class about Cloud-based IT infrastructure utilizing Amazon Web Services (AWS) and Microsoft Azure. The outcome of this course comprises of:

- 1. Basic-to-intermediate level design and administrative skills in:
 - a. Cloud-based IT Infrastructure Services
 - b. Big Data using Hadoop MapReduce
 - c. Web Design and Development
- 2. A hands-on project incorporating Cloud-based IT infrastructure

ACADEMIC SERVICE

Journal Reviewer:

Journals like Management Information Systems Quarterly (MISQ), Information Systems Research (ISR), Production and Operations Management (POM), Information Systems Journal (ISJ), European Journal of Information Systems (EJIS), Decision Support Systems (DSS), Information & Management (I&M), Information Systems Frontiers (ISF), Computers and Security (C&S), ACM Transactions on Information Systems (ACM TMIS), and Electronic Commerce Research and Applications (ECRA).

Early Career Associate Editor:

Journal of Strategic Information Systems (JSIS).

Coordinating Editor:

Information Systems Frontiers (ISF).

Editorial Reviewer Board:

Information Systems Research (ISR) Special Issue on Unleashing the Power of Information Technology for Strategic Management of Disasters.

Conference Reviewer:

Conferences like International Conference on Information Systems (ICIS), American Conference on Information Systems (AMCIS), Conference on Information Systems and Technology (CIST), Design Research in Information Systems and Technology (DESRIST), Hawaii International Conference on System Sciences (HICSS) and Midwest Association for Information Systems (MWAIS).

Workshop Reviewer:

Workshops like Dewald Roode Workshop on Information Security Research (IFIP), Workshop on E-business (WEB), Secure Knowledge Management (SKM) and Workshop on Information Security and Privacy (WISP).

Co-Chair:

Behavioral Information Security mini-track under the Information Security and Privacy (SIGSEG) track at American Conference on Information Systems (AMCIS) 2019.

Program Co-Chair:

Dewald Roode Workshop on Information Security Research (IFIP) 2021.

Associate Editor:

Cybersecurity, Privacy and Ethics of IS track at International Conference on Information Systems (ICIS) 2018.

Other Services:

Coordinator for Distinguished Speaker Series at the University of Texas at San Antonio. Advisor for 'Women in Cyber Security' student organization.

Panelist at Undergraduate Research Day at the Texas Capitol, Austin, TX.