Vandana Singh Avasty

Interim Program Director, College of Emerging and Collaborative Studies, Professor, School of Information Sciences, University of Tennessee Knoxville. Email: <u>vandana@utk.edu</u> Website: <u>www.sis.utk.edu/vandana</u>

RESEARCH INTEREST

Technology for Libraries, Gender and Information Technology, Open-Source Software, Online Communities, Diversity and Inclusion, Social Justice, Rural Libraries, User Experience, Usability, Online Learning, and AI Ethics.

ACADEMIC EXPERIENCE

College of Emerging and Collaborative Studies

Program Director

July 2023 - current

College of Communication, University of Tennessee, Knoxville

Director of Diversity, Equity, and Inclusion

July 2022 – June 2023

School of Information Sciences, University of Tennessee, Knoxville

Professor	July 2022 - current
Associate Professor	Aug 2014 to July 2022
Director of Undergraduate Studies	May 2017 to April 2019
Acting Associate Director, School of Information Sciences	Jan 2013 to Aug 2013
Coordinator, Information Science, and Technology Minor	Aug 2008 to July 2011
Assistant Professor	Aug 2008 to July 2014

Department of Information Science, University of North Texas

Assistant Professor,	Aug 2007 to July 2008
Coordinator, Digital Imaging Track	Aug 2007 to July 2008

iSchool at the University of Illinois at Urbana Champaign

Instructor, Undergraduate Minor	Aug 2006 to July 2007
Research Assistant,	August 2003-July 2004
Teaching Assistant, Graduate, and Undergraduate	2001-2002, 2002-2003, 2005-2006

EDUCATION

Ph.D. University of Illinois at Urbana-Champaign, Information Science 2008

M.S	University of Chicago	Computer Science	2006
M.Sc.	Wageningen University, the Netherlands	Knowledge Management Systems	2001
B.Sc.	G.B. Pant University, Pantnagar, India	Economics	1998

Doctoral Dissertation: "Knowledge Creation, Sharing and Reuse in Online Technical Support for Open-Source Software." Dissertation Chair: Prof. Michael Twidale, iSchool at University of Illinois at Urbana-Champaign Committee Members: Prof. Linda Smith, Prof. Chip Bruce (iSchool, UIUC), and Prof David Nichols (Computer Science, University of Waikato – New Zealand)

HONORS AND AWARDS

- 1. Selected as a 3C Fellow at Duke University Computer Science program on inclusive computing. (2022-2024)
- 2. Awarded College of Communication and Information Faculty Research Award 2021.
- 3. Keynote Speaker at ThriveWise conference, June 30th, 2021 <u>https://www.thrive-wise.org/micro-</u>conference-2021/
- 4. Two Featured Articles relevant for practitioners for *Informed Librarian Online* July/August 2019 & July/August 2020 issues.
- 5. Awarded College of Communication and Information Service and Outreach Award for 2018-2019.
- Paper nominated for the best paper award at the 15th International Conference of Open Source Systems, 2019.
- Nominated by the Dean, College of Communication and Information, for Faculty Appreciation Week, February 2019 <u>https://faw.utk.edu/2019/02/06/vandana-singh/</u>
- 8. Selected for the UTK Leadership Institute, 2017-2018
- 9. Winner of the Competition at IISE Annual Conference, Data Analytics, and Information Systems Division - Co-Advised a team of students in ISE at UTK to enter a team competition for Mobile Apps. "Speak For Myself" - First Place in May 2018 IISE CIS Division Mobile App competition
- Recognized by <u>the Office of Community Engagement & Outreach</u>, the University of Tennessee recognizes 50 Partnerships that Make a Difference (<u>http://engagement.utk.edu/wp-</u> <u>content/uploads/sites/7/2015/01/117401-Carnegie-Partnershipv9.pdf-2.pdf</u>): Rural Library Professionals Program [Spring 2015].
- One of the Top Five Papers at IFLA 2011, Mehra, B., Black, K., Singh, V., and Nolt, J. (2011). Mapping the Education of Rural Librarians' Technology Literacy and Management Training: Use of Mixed Data Collection Methods in the ITRL Program.
- 12. Best Conference Paper ALISE 2011. "What is the Value of LIS Education? A Qualitative Analysis of the Perspectives of Tennessee's Rural Librarians. Bharat Mehra, Kimberly Black, Vandana Singh, & Jenna Nolt
- Junior Faculty Fellow to Provost, 2010, nominated and selected by the School of Information Sciences and College of Communication and Information, July 2010

- Innovative Technology Teaching Award 2010, given by College of Communication and Information, University of Tennessee, May 2010
- 15. Outstanding Assistant Professor 2010 for the year given by the School of Information Sciences, College of Communication and Information, University of Tennessee, May 2010
- 16. Scholar of the Week, University of Tennessee, Week of 7/11/09.
- 17. Best Note of CSCW 2008 Singh, V. and Twidale, M., "The Confusion of Crowds: non-dyadic help interactions" Short Paper ACM Computer Supported Cooperative Work Conference, 2008.
- Best research paper 2006 of the mini-track at Hawaii International Conference on System Sciences 39 2006
- 19. Lucile-Huntington Fellowship by the Graduate School of Library and Information Science at UIUC 2004-2005.
- 20. Dutch Government Fellowship for masters' program Wageningen University (1999-2000)
- 21. President of the International Students Organization at Wageningen University, the Netherlands. (2000)
- 22. Speaker at the Graduation Ceremony for masters' students at Wageningen University, 2000
- 23. National Debate Champion in India for two years (1996 & 1998)
- 24. President's Award for Best Voluntary Worker of the State for National Service Scheme (1996)

PUBLICATIONS, GRANTS & PRESENTATIONS

Refereed Journal Articles

- Tahamtan I, Potnis D, Mohammadi E, Singh, V., Miller LE. (2022). "The Mutual Influence of the World Health Organization (WHO) and Twitter Users During COVID-19: Network Agenda-Setting Analysis." Journal of Medical Internet Research. 2022 Apr 26;24(4):e34321. doi: 10.2196/34321.
 PMID: 35275836; PMCID: PMC9045487.
- Singh, V., and Thurman, A., and Bongiovanni (2021). A Systematic Literature Review of Online Learning (1998-2018). Journal of Education for Library and Information Science (JELIS). <u>https://utpjournals.press/doi/ref/10.3138/jelis-2020-0107</u>
- Tahamtan, I., Potnis, D., Mohamadi, E., Miller, L., and Singh, V. (2021). "Framing of and Attention to COVID-19 on Twitter: A Thematic Analysis of Hashtags". Journal of Medical Internet Research. 2021;23(9):e30800 <u>https://doi.org/10.2196/30800</u>
- Singh, V. and Bongiovanni, B.A. (2021) Motivated and Capable but No Space for Error Women's Experiences of Contributing to Open Source Software. International Journal of Information, Diversity and Inclusion. Volume 5 (3). <u>https://doi.org/10.33137/ijidi.v5i3.36197</u>
- Singh, V., Mehra, B and Sikes, S. (2021). Framework for Agriculture-Based Community Engagement in Rural Libraries. Journal of Librarianship and Information Sciences May 2021 <u>https://journals.sagepub.com/doi/10.1177/09610006211015788</u>

- Singh, V., Bongiovanni, B. & Brandon, W. Codes of conduct in Open Source Software—for warm and fuzzy feelings or equality in community?. Software Quality Journal (2021). <u>https://doi.org/10.1007/s11219-020-09543-w</u>
- Mehra, B., Sikes, E. S., and Singh, V. (2019). Scenarios of technology use to promote community engagement: Overcoming marginalization and bridging digital divides in the Southern and Central Appalachian rural libraries. Information Processing & Management, Volume 57, Issue 3 2019, ISSN 0306-4573, <u>https://doi.org/10.1016/j.ipm.2019.102129</u>
- Mehra, B., Sikes, E. S., and Singh, V. (2019). Scenarios of Health Engagement Experiences and Health Justice in Rural Libraries. International Journal of Information, Diversity, & Inclusion (Special Issue: Health Justice. Edited by Paul Jaeger) Volume 3, Issue 3 Part 1 <u>https://doi.org/10.33137/ijidi.v3i3.32963</u>
- Singh, V. (2019). Applying Participatory Action Approach to Integrating Professional Librarians into Open Source Software Communities. Journal of Librarianship and Information Science. Volume 52 Issue: 2, page(s): 541-548 <u>https://doi.org/10.1177/0961000619836724</u> Featured Article for July/August 2020 issue of Informed Librarian Online.
- Singh, V., and Thurman, A. (2019). Definitions of Online Learning: An investigation into the evolution of online learning definitions (1993- 2018). American Journal of Distance Education. Volume 33

 Issue 4, pages: 289-306. <u>https://doi.org/10.1080/08923647.2019.1663082</u>
- Singh, V. (2019). Personas and Scenarios as a Methodology for Information Sciences. Qualitative and Quantitative Methods in Libraries, [Special Issue], v. 7, n. 1, p. 123-134, Feb. 2019. ISSN 2241-1925. Available at: <u>http://qqml-journal.net/index.php/qqml/article/view/462</u>
- Mehra, B., Black, K., Singh, V., Nolt, J., Williams, K.C., Simmons, S., and Renfro, N. (2017). The Social Justice Framework in the Information Technology Rural Librarian Master's Scholarship Program: Bridging the Rural Digital Divides. Qualitative and Quantitative Methods in Libraries, [Special Issue], p. 5-11, June 2017. ISSN 2241-1925. Available at: <u>http://qqmljournal.net/index.php/qqml/article/view/206</u>
- Mehra, B., and Singh, V. (2017). Recruitment Methods in the Information Technology Rural Librarian Master's Scholarship Program (Part I and Part II): Implications of Social Justice in the Southern and Central Appalachian Region. Qualitative and Quantitative Methods in Libraries, [Special Issue], p. 13-22, June 2017. ISSN 2241-1925. Available at: <u>http://qqmljournal.net/index.php/qqml/article/view/207</u>
- Singh, V. (2017). A Case Study of Migration to an Open Source ILS: Partnership among State Libraries. Qualitative and Quantitative Methods in Libraries, [Special Issue], p. 49-57, June 2017. ISSN 2241-1925. Available at: <u>http://qqml-journal.net/index.php/qqml/article/view/212</u>
- Singh, V. (2017). Open Source Software Use in Libraries: Implications for Social Justice. Qualitative and Quantitative Methods in Libraries, [Special Issue], p. 59-68, June 2017. ISSN 2241-1925. Available at: <u>http://qqml-journal.net/index.php/qqml/article/view/211</u>
- Singh, V. (2017). Open source integrated library systems migration: Librarians share the lessons learned. Journal of Librarianship and Information Science. Volume 51, Issue 2 pages 346-355

https://doi.org/10.1177/0961000617709059 - Featured Article for July 2019 issue of Informed Librarian Online.

- Singh, V. (2014). Expectations versus Experiences: Librarians using Open Source Integrated Library Systems. ", The Electronic Library, Vol. 32 No. 5 (September), pp. 688-709. <u>https://doi.org/10.1108/EL-10-2012-0129</u>
- Singh, V. (2013). The nuts and bolts of migration to open source ILS: Experiences and Recommendations from the librarians. LIBRI International Journal of Libraries and Information Services, Volume 63, Issue 2, Pages 108–122, ISSN (Online) 1865-8423, ISSN (Print) 0024-2667, <u>https://doi.org/10.1515/ibri-2013-0009</u>
- Singh, V. (2013). Why Open Source ILS? Librarians Share their Reasons and Experiences. LIBRI International Journal of Libraries and Information Services, 63 (3): 206-219.
- Hendrickson, E., Singh, V., and Redmond, C (2013). iPerceive: Platform Priorities and Workplace Innovation in America's Consumer Magazine Industry. Journal of the International Symposium on Online Journalism.
- Holt, L., and Singh, V. (2012). "Self-direction and Open Source Software Forum Participants: Characteristics and Relationships" International Journal of Self-Directed Learning, Volume 9, Number 2, Fall 2012, Page 28-43
- Singh, V., and Holt, L. (2012). Learning and Best Practices for Learning in Open Source Software Communities, Computers, and Education 63 (April 2013), 98–108. <u>http://www.sciencedirect.com/science/article/pii/S0360131512002862</u>
- Singh, V. (2012). Experiences of Migrating to Open Source Integrated Library Systems, Information Technology, and Libraries, Volume 34 (4), 36-53.
- Singh, V., and Mehra, B. (2012). Strengths and Weaknesses of the Information Technology Curriculum in Library and Information Science Graduate Programs, Journal of Librarianship and Information Science, as DOI:10.1177/0961000612448206 45(3), 219-231.
- Mehra, B., Black, K., Singh, V., and Nolt, J. (2011). Collaboration between LIS Education and Rural Libraries in the Southern and Central Appalachia: Improving Librarian Technology Literacy and Management Training [Brief Communications and Research in Progress]. Journal of Education for Library and Information Science, 52(3), 238-247.
- Mehra, B., Black, K., Singh, V., and Nolt, J. (2011). What is the Value of LIS Education? A Qualitative Analysis of the Perspectives of Rural Librarians in Southern and Central Appalachia [Best Paper for the 2011 Association for Library and Information Science Education (ALISE) Annual Conference]. Journal of Education for Library and Information Science, 52(4), 265-278.
- Mehra, B., **Singh, V.**, and Parris, H. (2010). Open Source Software Collaborations in Tennessee's Regional Library System: An Exploratory Study. Library Review, 59(9), 690-701.

Payne, A. & Singh, V. (2010). Open Source Use in Libraries. Library Review 59(9), 708-717.

Peer-reviewed Book Chapters

- Wolske, M., Rathi, D., Singh, V. and Grob. H. (2020) Introducing the Command Line. Contributed chapter in A Person-Centered Guide to Demystifying Technology, Illinois Open Publishing Network. Windsor and Downs Press ISBN 978-1-946011-12-1
 https://doi.org/10.21900/wd.7
 https://iopn.library.illinois.edu/pressbooks/demystifyingtechnology/
- Mehra, B., and Singh, V. (2017). Library Leadership-In-Training as Embedded Change Agents to Further Social Justice in Rural Communities: Teaching of Library Management Subjects in the ITRL and ITRL2. In Nicole A. Cooke and Miriam E. Sweeney (Eds.), *Teaching for Justice: Implementing* Social Justice in the LIS Classroom. Sacramento, CA: Library Juice Press.
- Mehra, B., Singh, V., Hollenbach, N., and Partee II, R.P. (2017). "A Community Informatics Model in ICT Use to Train Rural Librarians in the Southern and Central Appalachian Region as Change Agents in the 21 Century" Book Chapter proposal in *Rural and Small Public Libraries: Challenges and Opportunities* (Advances in Librarianship book series). Bingley, United Kingdom: Emerald Group Publishing.

Peer-reviewed Conference Proceedings

- Singh, Vandana, Bilal, D., Cox, A., Hope, G. Chidziwisano, Dinneen, J. (2023). "Global AI Initiatives: From Theory to Practice." Panel at the Association for Information Science and Technology (ASIS&T), 2023, October 27th to 30th, 2023, London, United Kingdom.
- Ashiq, Murtaza; Warraich, Nosheen Fatima; Mehra, Bharat; **Singh, Vandana.** (2023). "Equity, Diversity, Inclusion, and Accessibility in LIS to Drive Sustainability and Growth of the Profession," Panel presentation at ASIS&T 2023 Mid-Year Conference. <u>https://www.asist.org/my23/mid-year-conference-abstracts/</u>
- Singh, V., Cooke, N., Rorissa, A., Knox, E., and Hands, A. (2022) "Opportunities and challenges for People of Color in LIS Leadership." Panel at ALISE conference, October 25th, 2022
- Singh, V. (2022) Discrimination, Misogyny and Harassment: Examples from OSS (Content Analysis of Women-focused Online Discussion Forums. ACM/IEEE Third Workshop on Gender Equality, Diversity, and Inclusion in Software Engineering at the 44th International Conference on Software Engineering (ICSE 2022) – May 2022, Pittsburgh, USA <u>https://geworkshop.github.io/</u>
- Singh, V. and Jeffrey C. Carver. (2022). Educating Students to be Better Citizens of Tech Communities. In Proceedings of the 53rd ACM Technical Symposium on Computer Science Education V. 2 (SIGCSE 2022). Association for Computing Machinery, New York, NY, USA, 1053. DOI: <u>https://doi.org/10.1145/3478432.3499242</u>
- Singh, V., and Brandon, W. (2020). How do the women of Open Source support each other? An investigation into women-focused online discussion forums. Proceedings of 53rd Hawaii International Conference on System Sciences, January 7 10, 2020, Maui, Hawaii.
- Singh, V., and Brandon W. (2019) Open Source Software Community Inclusion Initiatives to Support Women Participation. In: Bordeleau F., Sillitti A., Meirelles P., Lenarduzzi V. (eds) Open Source Systems. OSS 2019. IFIP Advances in Information and Communication Technology, vol 556. Springer, Cham. Nominated for Best Paper. <u>https://link.springer.com/chapter/10.1007/978-3-030-20883-7_7</u>

- Singh, V. (2019). Women participation in open source software communities. In Proceedings of the 13th European Conference on Software Architecture - Volume 2 (ECSA '19), Laurence Duchien, Catia Trubiani, Riccardo Scandariato, Raffaela Mirandola, Elena Maria Navarro Martinez, Danny Weyns, Anne Koziolek, Patrizia Scandurra, and Clément Quinton (Eds.), Vol. 2. ACM, New York, NY, USA, 94-99. DOI: <u>https://doi.org/10.1145/3344948.3344968</u>
- Singh, V. (2019). Women-only spaces of open source. In Proceedings of the 2nd International Workshop on Gender Equality in Software Engineering (GE '19). IEEE Press, Piscataway, NJ, USA, 17-20. DOI: <u>https://doi.org/10.1109/GE.2019.00010</u>
- Singh, V. (2019). "What do global researchers mean when they say "Online Learning?" The annual conference of the Association of Library and Information Science Education, Peer-reviewed abstract, Work in Progress poster at ALISE 2019, Knoxville.
- Singh, V. (2019) "Integrating Professional Librarians into Open Source Software Communities" Annual conference of the Association of Library and Information Science Education, Juried panel at ALISE 2019, Knoxville.
- Mehra, B., Singh, V., and Sike, E.S. (2019). A Model of Community-Engaged Scholarship Across "Institutional Borders" to Assess the Role of Rural Libraries in Community Engagement in the Southern and Central Appalachia. Proceedings of the 47th Annual Conference of the Canadian Association for Information Science, 2019, University of British Columbia, Vancouver, Canada from June 3- 6, 2019
- Mehra, B., Sikes, E.S., Singh, V. (2019). Scenarios of Health Engagement Experiences and Health Justice in Rural Libraries. Medical Library Association Conference: Elevate. Chicago, Illinois. May 3-8, 2019
- Mehra, B., Sikes, E. S. and Singh, V. (2019), An exploratory GIS prototype to map community engagement in the Southern and Central Appalachian rural libraries. Proceedings of the Association for Information Science and Technology, 56: 735-737. <u>https://doi.org/10.1002/pra2.154</u>
- Hank, C., Singh, V., and Simone, S. (2019). Social Media Policy Analysis for Primary and Secondary Public Schools and Districts. I-Conference Poster, I-Conference, 2019. 4 pages
- Mehra, B., Sikes, E. S.; Barrett, C.; Singh, V. (2018). Information technology use behaviors of communityengaged rural librarians: A future beyond the theory-practice discourse to integrate impact. Short paper. Association for Information Science and Technology (ASIS&T) Special Interest Group Information Needs, Seeking and Use (SIGUSE) Symposium, in Vancouver, Canada, November 10-14, 2018.
- Mehra, M., Singh, V., and Sikes, E.S. (2018). A works-in-progress poster, "Assessment of rural library professionals' role in community engagement in the Southern and Central Appalachian region: Mobilization from change agents to community anchors (CA2CA@SCA-RL)." Association of Library and Information Science Education, February 6- 9 Denver, Colorado 2018.
- Mehra, M., and **Singh, V**. (2018). "A juried panel, "Library leadership-in-training as embedded change agents to further social justice in rural communities: Teaching of library management subjects in the ITRL and ITRL2. Association of Library and Information Science Education, February 6-9 Denver, Colorado 2018.
- "Speak For Myself" Co-Advised a team of students in ISE at UTK to enter a team competition for Mobile Apps. Winner of the competition - First Place in May **2018** Institute of Industrial and System Engineers, Computer and Information Systems Division Mobile App competition.

- Mehra, B., and Singh, V. (2015). A Social Justice Framework to Further Community Engagement in Pakistan's Information Management and Library Professions, Proceedings of the International Conference on Information Management & Libraries, Department of Information Management, University of Punjab, Quaid-i-Azam Campus, Lahore-Pakistan, from 10-13 November 2015.
- Singh, V., (2013). "Challenges of Open Source ILS Adoption" Poster, Proceedings of 76th Annual Meeting of the Association for Information Science and Technology, Beyond the Cloud: Rethinking Information Boundaries, November 1-6, 2013, Centre Sheraton, Montreal, Quebec, Canada
- Singh, V. (2013) "Evaluating and Improving an Information Portal for Open Source Integrated Library Systems" Proceedings of the 15th International Conference on Human-Computer International 2013 (HCI 2013), 21-26 July 2013, Las Vegas, USA.
- Singh, V. and Holt, L. "Online Technical Support: How It Works and Why It Fails?" 2013 46th Hawaii International Conference on System Sciences, Wailea, Maui, HI, 2013, pp. 3187-3196. DOI: 10.1109/HICSS.2013.429
- Mehra, B., Singh, V., Mitchell, C., Williams, K. C., Simmons, S., and Renfro, N. (2012). Empowering Rural Librarians as Change Agents in the 21st century: Development of Community-Based Technology Literacy and Management Outcomes in the Southern and Central Appalachia (Poster). World Library and Information Congress: 78th International Federation of Library Associations and Institutions (IFLA) General Conference and Assembly, August 11-17, 2012, Helsinki, Finland.
- Normore, L. and Singh, V., (2012) Mental Models: Setting User Expectations for ICTs. Poster, Proceedings of I-Conference, 2012, February 7 -10, 2012 Toronto, Canada
- Singh, V. (2012). Newcomer Integration and Learning in Technical Support Communities for Open Source Software. Proceedings of the ACM International Conference on Supporting Group Work (GROUP '12), 26-30 October 2012, Sanibel Island, FL, 65-73.
- Boehm, M., and Singh, V. (2012) Citizen Users and Interactivity on Government Environmental Agency Web Pages: An analysis of Colony Collapse Disorder Information. Proceedings of American Society for Information Science and Technology, October 26- 31, 2012, Baltimore, MD.
- Mehra, B., Black, K., Singh, V., Nolt, J., Williams, K.C., Simmons, S., and Renfro, N. (2012). Computer-Enabled Innovations in the Information Technology Rural Librarian Master's Scholarship Program: Bridging Rural Digital Divides in the Southern and Central Appalachia, Proceedings of the 57th Indian Library Association Annual Conference, 23-25 February 2012, Mangalore, Karnataka.
- Singh, V., Kathuria, S. & Johri, A. (2012). Newcomer integration and learning in technical support communities for Open Source Software. Interactive Paper, Proceedings of ACM Conference on Computer Supported Collaborative Work, Feb. 11-15, 2012, Seattle, WA.
- Mehra, B., Black, K., Singh, V., and Nolt, J. (2011). Mapping the Education of Rural Librarians' Technology Literacy and Management Training: Use of Mixed Data Collection Methods in the ITRL Program. Proceedings of the World Library and Information Congress: 77th International Federation of Library Associations and Institutions General Conference and Assembly. In top 5 papers. [Library Theory and Research Section and Statistics and Evaluation Section], 13-18 August 2011, San Juan, Puerto Rico.
- Singh, V., Johri, A., and Mitra, R. (2011). Types of Newcomers in an Online Developer Community. Interactive Paper, Proceedings of the Computer Supported Cooperative Work 2011, (Shanghai, China), ACM, 2011

- Mitra, R., **Singh, V**., and Johri A., (2011) Cyberlearning Ecosystem Users, Technology, and Tools. Poster, Proceedings of I-Conference, 2011, Seattle, Washington 2011
- Singh, V. (2010) Comparison of Technical Support for Open Source Software and Proprietary Software. Poster, Proceedings of American Society for Information Science and Technology Annual Conference: Navigating Streams in an Information Ecosystem, October 22-27, 2010, Pittsburgh, PA.
- Singh, V. & Johri, A. (2010). Newcomer Participation in Cyberlearning Environments: Lessons from Open Source Communities. Poster, National Science Foundation Engineering Education Programs Awardees Conference. January 31- February 2, 2010. Reston, Virginia.
- Singh, V., Twidale, M.B., and Nichols, D.M. (2009). Users of Open Source Software: What are they contributing? Proceedings of Hawaii International Conference on System Science (HICSS 42), IEEE, January 2009.
- Singh, V., (2008). Modes of Technical Support in Open Source Software Peer to Peer Digital Knowledge Creation, Sharing and Re-Use" Poster, Proceedings of American Society for Information Science and Technology Annual Conference, October 2008, Columbus, Ohio
- Rathi, D., Twidale, M. B., Singh, V., and Bisen, A. (2008). Users = Designers: A Participatory Approach in Designing Knowledge Management System. Proceedings of International Conference on Knowledge Management (ICKM), October 2008.
- Singh, V., and Twidale, M.B. (2008). The Confusion of Crowds: non-dyadic help interactions. Proceedings of ACM Conference of Computer Supported Cooperative Work 2008, San Diego, CA. Winner of "Best Note of CSCW 2008" Award
- Rathi, D., Twidale, M. B. Singh, V., and Jones, M. C. (2007). Your Mark is My Dirt: Impact of Email Signatures on Decision Making, Proceedings of 9th International Conference on Decision Support Systems, January 2-4, 2007, India.
- Singh, V., Twidale, M., Rathi, D., (2006). Open Source Technical Support A look at Peer Help Giving. Proceedings of Hawaii International Conference on System Science (HICSS – 39), IEEE, January 2006. "Best Paper of the Mini-Track".
- Rathi, D., Twidale, M., Singh, V. (2005). Adapting Knowledge Management Systems for Collaborative Technical Problem Solving. International Conference on Knowledge Management (ICKM), ASIST, October 2005.
- Rathi, D., **Singh, V.**, Gebauer, J., (2004). Ubiquitous Computing for Knowledge Management. Proceedings of Knowledge Sharing and Collaborative Engineering (KSCE 2004), IASTED, November 2004.
- Jones, M. C., Medina, K. E., Rao, A., Rathi, D., Singh, V. (2004). I-Vote: an audience voting system. Student competition paper. CHI extended abstracts on human factors in computing systems, April 2004

Invited Presentations

- At the AI Tennessee Visioning Workshop on April18th, 2023, about Outreach and Engagement for AITENNessee initiative <u>https://research.utk.edu/oried/research-innovation-initiatives/ai-tennessee-initiative/</u>
- At US-RSE DEI Speaker Series on August 31st, 2022, about Diversity in Open-Source Software <u>https://us-rse.org/events/2022/2022-08-dei-speaker-series/</u>

- As the DEI Director for CCI, I presented to the Rotary Breakfast Club in Oakridge about the Diversity initiatives at CCI on August 31st, 2022.
- At ORNL on June 9th, 2022, to the Women in Neutron Sciences Group about women's experiences in STEM fields. <u>https://neutrons.ornl.gov/wins/events</u>
- At the University of Tennessee Virtual Sparks Event on Artificial Intelligence on February 2nd, 2022, to share my approach towards teaching AI Ethics in DEI Context. I discussed my curriculum development work as part of the Google Award for Inclusion research project. <u>https://research.utk.edu/oried/2022/01/05/virtual-sparks-artificial-intelligence/</u>
- At the SEC Mini-Conference on Artificial Intelligence in the Curriculum on April 8th, 2022 https://ai.ufl.edu/sec-mini-conference/
- At the ORIED Diversity education group about teaching DEI topics on February 24th, 2022
- At the Linux Foundation Event on September 24th, 2021 *Linux Plumbers Conference, 2021 Diversity, Equity and Inclusion session*; the topic of the talk was Motivations and Experiences of Women of Open Source Software. <u>https://lpc.events/event/11/sessions/122/#20210924</u>
- Keynote Speech at ThriveWise conference, June 30th, 2021 <u>https://www.thrive-wise.org/micro-conference-2021/</u>

At the Safe Space session on Microaggressions at the ThriveWise conference. September 25th, 2021.

Articles published in non-referred venues/journals

- Mehra, B., Black, K., Singh, V., Renfro, N., Reynolds, D., Simmons, S., & Williams, K. C. (2010). Rural Library Professionals as Change Agents in the 21st Century: Integrating Information Technology Competencies in the Southern and Central Appalachian Region. *Tennessee Libraries*.
- Black, K., Mehra, B., and Singh, V. (2011). Scope of Broadband Education and Deployment in Rural Libraries: Desperately-Seeking Partners in a Grant Proposal. *Tennessee Libraries*.URL: http://tnla.org/displaycommon.cfm?an=1&subarticlenbr=428.

Articles published in an electronic venue

Singh, V. (2023). The retention problem: women are going into tech but are also being drive out. In The Conversation. <u>https://theconversation.com/the-retention-problem-women-are-going-into-tech-but-are-also-being-driven-out-200625</u>

GRANTS (15 in number, totaling over 3 million dollars)

In Progress

2022 – 2023 "Comparing the Retention, Coping, and Mental Health of Women in Computing Professionals Globally" **V. Singh (PI)** and L. Miller (Co-PI) funded by Global Catalyst Research Grant - UTK (\$6,000) 2021 – 2022 Educating Students to be Better Citizens of Tech Communities: DEI Focus (\$60,000) V. Singh (PI) & Jeff Carver (Co-PI) funded by Google

Completed

- 2018 2019 Online learning fusion grant Funded by UTK, V. Singh and Shteynberg, G. (\$10,000)
- 2016-2018 Assessment of Rural Librarians' Role in Community Engagement in the Southern & Central Appalachian Region: Mobilization from Change Agents to Community Anchors (CA2CA@SCA-RL) Funded by Institute of Museum and Library Services (IMLS), August 2016, B. Mehra. & V. Singh (Co-PI) (\$48,758)
- 2012 2016 Rural Library Professionals as Change Agents in the 21st Century: Integrating Information Technology Competencies in the Southern and Central Appalachian Region (Part II) (ITRL2) Funded by Institute of Museum and Library Services, *Laura Bush 21st Century Librarian Program*, B. Mehra, PI, and V. Singh, Co-PI. (\$478,258)
- 2014-2015 Deans Summer Research Grant \$2000
- 2009 2014 "ScienceLinks2" PhD. Principal Investigator: Suzie Allard (SIS), Co-Principal Investigators: Sally McMillan (Advertising/PR), and Carol Tenopir (SIS). Academic Mentor V. Singh, L. Normore. Funded by: IMLS \$711,727.
- 2012 2013 iLearn? Magazine platform production and adaptive learning, Funded By Office of Research, University of Tennessee, Co-PIs **V. Singh** and Elizabeth Hendrickson \$3,600
- 2012-2013 Deans Summer Research Grant \$2000
- 2009 2013 Information Technology Competencies for Librarians Funded by IMLS Award Amount: \$567,660 Dr. Bharat Mehra, (PI), Dr. Kimberly Black and **Dr. V. Singh, Co-PIs**
- 2009 2013 Comparison of Technical Support for Open Source vs Proprietary Integrated Library Systems Funded by IMLS Early Career Grant \$321,178 V. Singh, PI
- 2009 2012 Identifying Practices and Tools to Promote newcomer Participation in Cyberlearning Environments. Funded by: NSF IEEE-Exploratory Grant V. Singh, PI (\$200,000)
- 2009 2011 Increasing Biodiversity Information Sources (IBIS) Principal Investigator: C. Tenopir.
 Co-Principal Investigators: S. Allard, L. Normore, V. Singh. Funded by: USGS National Biological Information Infrastructure \$498,518
- 2007-2008. The Texas Course Redesign Learning Object Repository: Research and Development for a Production System. Funded by: Texas Higher Education Coordinating Board V. Singh, Co-PI. Funds \$250,000
- 2007 2008. Technical Support in Open Source Software Peer to Peer Digital Knowledge Creation, Sharing, and Re-Use Funded by the University of North Texas under Junior Faculty Research Grant. **V. Singh, PI** (\$10,000)

TEACHING EXPERIENCE

Courses Developed and Taught at the University of Tennessee (Fall 2008 - to date)

- INSC 495: Diversity, Equity, and Inclusion for Technology and Information Professionals (DEI:TIP)

 Online Synchronous
- 2. INSC 585: Information Technologies Online synchronous and face to face
- 3. INSC 581: Information Networking Applications Online synchronous and face to face
- 4. INSC 598: Web Design Online synchronous, online asynchronous and face to facce
- 5. INSC 590: Web Development Using Content Management Systems Online synchronous
- 6. INSC 586: Usability Testing and Methods Online synchronous
- 7. INSC 514: Foundations of Information Technology Online synchronous and face to face
- 8. INSC 591: Independent Study, 33 since Fall 2008 online and face to face

Courses taught at the University of North Texas (Fall 2007 – Spring 2008)

SLIS Topics on Digital Imaging for Information Professional - online asynchronous

Teaching Assistant for Courses at the University of Illinois Urbana-Champaign

Undergraduate Courses

- 1. LIS 201 Information, Technology and Organizations face to face
- 2. LIS 202 Social Aspects of Information Systems face to face
- 3. LIS 210 Computing in the Humanities face to face
- 4. LIS 290 Programming Web Mashups (Developed and taught face to face)

Graduate Courses LIS 310 Information, Organization and Access

1. LIS 320 Libraries, Information, and Society - Online synchronous and face to face

DISSERTATION AND THESIS COMMITTEES

Thesis Supervised

Meredith Boehm "Analysis of CCD Information on WWW: Complex Environmental Problems and Web Information Quality" Thesis defended May 2012.

Membership on graduate degree candidates committees

Doctoral Dissertation Committees

- 1. Jason Rieger, Ph.D. Program College of Communication and Information, UTK
- 2. Lei Wu, Ph.D. Program College of Communication and Information, UTK
- 3. Chip Howley, Ph.D. Program in Computer Science (EECS department), UTK
- 4. Kelly Robinson, Ph.D. Program in Instructional Technology, UTK
- 5. Rosie Sasso, Ph.D. Program in Instructional Technology, UTK
- 6. Frank Ailes, Ph.D. Program College of Communication and Information, UTK
- 7. Iman Tahamtan, Ph.D. Program College of Communication and Information, UTK
- 8. Shreenandan Rajarathnam, Ph.D. Program, College of Communication and Information, UTK (Committee Chair)

Doctoral Committee for Comprehensive Exam:

- 1. Lei Wu, Ph.D. Program College of Communication and Information, UTK
- 2. Jason Rieger, Ph.D. Program College of Communication and Information, UTK

- 3. Rosie Sasso, Ph.D. Program in Instructional Technology, UTK
- 4. Kelly Robinson, Ph.D. Program in Instructional Technology, UTK

ePortfolio Committees

Janelle Cleaves, 2016, Kymberlee Byrge, 2016, Kathrine Chalman, 2016, Michael Arrington, 2017, Kathleen Tyree, 2017, Chelsea Seddon, (chair) 2018, Amy Esgh, (chair) 2019, Susannah Choate (chair), 2018, Sarah Holt, 2019, Heather Doncaster (chair), 2019, Timothy Holmes (chair), 2019

Master's Thesis Committee Member

- 1. Sarah McClung, School of Information Sciences, Advisor: Dr. Suzie Allard
- 2. Scott E. Sikes, School of Information Sciences, Advisor: Dr. Bharat Mehra
- 3. Kimberly Cupp, School of Information Sciences, Advisor: Dr. Peiling Wang
- 4. Hannah Fountain, School of Information Sciences, Advisor: Dr. Brian Dobreski
- 5. Esther Dowell, School of Information Sciences, Advisor: Dr. Devendra Potnis

SCHOOL, COLLEGE, AND UNIVERSITY SERVICE

School of Information Sciences

Director of Undergraduate Studies

From 2016 to 2019, I led the efforts to develop, propose, and offer a bachelor's degree program at the School of Information Sciences. I served as the inaugurating Director of the Undergraduate Studies from 2017 - 2019. In 2019, SIS completed all the stages of program approval and launched the bachelor's program in Fall 2019. This is the first degree of its kind in the state of Tennessee. The process of getting this approval, led by me included:

- Feasibility study for the undergraduate major
- Market research state of Tennessee policies, jobs, employers
- Stakeholder research surveyed target students, faculty and employers
- Collecting letters of support from internal and external stakeholders
- Coordination and collaboration with UTK, UT System and Tennessee Higher Education Commission representatives
- Collaboration with the SIS faculty to develop and approve the new curriculum this included 21 new courses, two new concentrations, and revisions of several courses.
- Leading the program approval at the school, college, and University undergraduate committees, over 3 years.
- Getting program approval from an external evaluator, working on their feedback to improve the program proposal
- Getting the UTK Board of Trustees, approval
- Getting the program approval from the Tennessee Higher Education Commission in Spring 2019.

Coordinator, Undergraduate Information Science, and Technology Minor UT School of Information Sciences 2008-2009, 2009-2010, 2010-2011, 2016-2017, 2018-2019

Chair, Comprehensive Examination Committee, UT School of Information Sciences, Fall 2010, Fall 2013

Chair, Ad hoc Physical Facilities and Technology Chapter, Committee on Accreditation Report, UT

- Chair, Peer Teaching Evaluation for Dr. Devendra Potnis, Spring 2015
- Chair, Peer Teaching Evaluation for Dr. Brian Dobreski, Spring 2022
- Chair, Undergraduate Planning Task Force, 2016-2017
- Chair, Undergraduate Program Committee, 2017-2018, 2018-2019
- Co-Chair, Faculty Search Committee, UT School of Information Sciences, 2012-2013
- *Member,* Student Affairs Committee, UT School of Information Sciences, 2008-2009, 2009-2010, 2010-2011
- *Member,* Faculty Search Committee, UT School of Information Sciences, 2009-2010, 2010-2011, 2018-2019, 2020-2021, 2022-2023
- Member, Awards and Assessment Committee, 2021-2022
- Member, Comprehensive Examination Committee, UT School of Information Sciences, Fall 2009,
- Summer 2010, Spring 2011, Fall 2009, Summer 2010, Spring 2012, Summer 2013, Fall 2014, Fall 2016, Spring 2015, Fall 2016, Spring 2017
- *Member,* Ad hoc Student Chapter, Committee on Accreditation Report, UT School of Information Sciences, 2008-2009
- Member, Ad hoc Data Management Task Force for Accreditation, 2014-2015, 2015-2016
- Member, Faculty Affairs Committee, UT School of Information Sciences, 2011-2012 (Spring), 2012-
- $2013,\,2013-2014,\,2014\text{--}2015,\,2015\text{--}2016,\,2019\text{--}2020,\,2020\text{--}2021,\,2021\text{--}2022$
- Member, Faculty and Doctoral Student Affairs Committee, 2021-2022
- *Member,* Alternatives to Comprehensive Examination Committee, UT School of Information Sciences, 2014-15
- Member, E-portfolio Revision Committee, UT School of Information Sciences, 2014-2015
- Member, Peer Teaching Evaluation for Dr. Kimberly Douglass, Spring 2015
- Member, Task Force for Planning for an Undergraduate Major, Spring 2016
- Member, Recruitment & Engagement Task Force, 2016-2017
- Member, SIS Administrative Committee, 2017-2018, 2018-2019

College of Communication and Information

Chair, Diversity, Equity, and Inclusion Committee, College of Communication, and Information 2022-2023

Chair, Undergraduate Committee, College of Communication, and Information, 2017-2018, 2018-2019 *Member,* Faculty Affairs Committee, College of Communication, and Information, 2014-2015, 2015-2016, 2019-2020, 2020-2021, 2021-2022, 2022-2023 *Member,* Research Advisory Group, College of Communication, and Information Symposium, 2014-2015, 2017-2018

Member, Undergraduate Affairs Committee UT College of Communication, and Information, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2016-2017, 2017-2018, 2018-2019

Member, Convergence Lab Committee, UT College of Communication, and Information, 2008-2009, 2009-2010

Member, Ph.D. Task Force, UT College of Communication and Information, 2010-2011

Member, Convergence Lab Committee, College of Communication and Information University of Tennessee 2008-2009

Member, Special Task Force for Ph.D. program revision, College of Communication and Information University of Tennessee 2010-2011, 2011-2012

University of Tennessee, Knoxville

Member, Council for Diversity and Inclusion, 2022-2023

Member, Diversity Directors Group, 2022-2023

Member, Ad hoc committee on establishing MoUs with HBCU's in Tennessee, 2022-2023

Junior Faculty Fellow - 2010-2011, 2011-2012, 2012-2013, 2013-2014

Senator - Faculty Senate 2014-2015, 2015-2016, 2016-2017

Member, Faculty Senate Committee on Library Services, and Information Technology, 2014-2015, 2015-2016, 2016-2017

Member, Research Council, 2016-2017

Member, Undergraduate Council, 2017-2018, 2019-2020

Member, Undergraduate Council 2017-2018, 2018-2019, 2019-2020 Curriculum Committee, Research Committee

Member, UTK Appeals Committee, 2017-2018, 2018-2019, 2019-2020

PROFESSIONAL SERVICE

Co-Chair – Fourth Workshop on Gender Equity, Diversity, and Inclusion in Software Engineering at the 45TH International Conference on Software Engineering (ICSE, 2023).

https://conf.researchr.org/home/icse-2023/ge-icse-2023#About

Executive Committee Member, Association of Computing Machinery-Women North America (ACM-W NA) <u>https://acmwnorthamerica.acm.org/exec-committee/</u>

Chair, Student Chapters, Association of Computing Machinery-Women North America (ACM-W NA) https://acmwnorthamerica.acm.org/exec-committee/

Chair, Academic Alliance Programming Committee The National Center for Women & Information Technology (NCWIT) <u>https://ncwit.org/higher-ed/#alliance</u>

NCWIT Designated Member for UTK

Member, IEEE CS TCSE Distinguished Education Award Committee 2023

https://tc.computer.org/tcse/awards/

Articles Reviewer, for Information Technology in Healthcare Track, Mini track: Cyberinfrastructure for Public Health and Health Services for Hawaii International Conference on System Sciences 2010 *Articles Reviewer,* for Internet and the Digital Economy Mini-Track: Open Movements: FLOSS, Open Contents, Open Access and Open Communities for Hawaii International Conference on System Sciences 2010, 2011, 2013

Co-chair for Internet and the Digital Economy Mini-Track: Open Movements: FLOSS, Open Contents, Open Access and Open Communities for Hawaii International Conference on System Sciences 2010, 2014

Article Reviewer for Journal of Education Library and Information Science, Fall 2010

Article Reviewer for Library and Information Science Research, Summer 2011

Article Reviewer for American Society for Information Science and Technology, Summer 2011

Article Reviewer for the Electronic Library, Spring 2012, Fall 2012

Article Reviewer for Computers and Education, Spring 2012, Fall 2012, 2013, 2018

Article Reviewer for I-Conference 2014

Article Reviewer for Computers and Human Behavior, 2013, 2014, 2015

Article Reviewer for American Journal of Distance Education, 2019

Article Reviewer for IEEE Software, 2019

Co-chair for Internet and the Digital Economy Mini-Track: Open Movements: FLOSS, Open Contents,

Open Access and Open Communities for Hawaii International Conference on System Sciences 2014

Reviewer for Student Scholarships for Grace Hope Celebration of Women in Computing, 2018

Reviewer for Student Scholarships for Grace Hope Celebration of Women in Computing, 2019

Organizing Committee member for the track on Open Source Software at the Grace Hope Celebration of Women in Computing, 2018, 2019, 2020, 2021

Editorial Board Member, Public Library Quarterly, 2017-2018, 2018-2019, 2019-2020

Program Committee Member, 21st International Conference on Agile Software Development XP2020 - track "Diversity & Inclusion in Agile," 2020

Member, Executive Committee ACM-W North America - 2021-2023

PROFESSIONAL ACTIVITIES

- Member of Diversity Scholar Network, National Center for Institutional Diversity (NCID) University of Michigan 2019 current
- Panelist for National Science Foundation Panel for Engineering Education Research proposals

submitted to Area One of the Innovations in Engineering Education, Curriculum, and Infrastructure (IEECI) announcement (NSF10-502). March 16-17, Washington D.C.

- Mini-Track Co-chair for Hawaii International Conference on System Sciences In this role, I worked with other co-chairs to propose the mini-track, publicize the mini-track, solicit contributions, prepared a list of reviewers, organized the review process and wrote reviews and acceptance/rejection letters and will help in running the mini-track at the conference.
- Attended Web Wise 2010 Imagining the Digital Future -Conference on Libraries and Museums in the Digital World March 3-5, 2010 Colorado Convention Center Denver, Colorado.
- Attended Proposal Writing Institute offered by UT Office of Research, Fall 2015

Current Professional Memberships

- Association of Computing Machinery (ACM)
- Association of Computing Machinery Women (ACM-W)
- American Society for Information Science & Technology (ASIS&T)
- Association of Library and Information Science Educators (ALISE)
- Institute of Electrical and Electronics Engineers (IEEE)