Aditya Johri

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Current Position

George Mason University, Fairfax, VA
Department of Information Sciences & Technology (IST), College of Engineering & Computing (CEC)

Professor   2019 – Present
Dr. Lawrence Cranberg Endowed Research Fellow
Director, Technocritical Research on AI, Learning & Society Laboratory (trailsLAB)
Affiliate Faculty: Computer Science (CS), Civil, Environmental & Infrastructure Engineering (CEIE), Mechanical Engineering (ME), Institute for Digital InnovAtion (IDIA)
Associate Professor   2014 – 2019
Department Chair   2014 – 2015

Previous Positions

Virginia Tech, Blacksburg, VA
Department of Engineering Education, College of Engineering

Assistant Professor – Associate Professor (tenured Aug. 2013)   2007 – 2013
> *Affiliate Faculty:* Computer Science (CS), Ind & Sys Engineering (ISyE), Science & Technology in Society (STS); Center for Human-Computer Interaction (CHCI), Human-Centered Design (HCD) Program.

Visiting Academic/Industry Positions

Visiting Scholar, *Leverhulme Center for the Future of Intelligence, Cambridge University, UK*   2022
Global Visiting Professor, *Institute for Ethics in AI, Technical University of Munich, Germany*   2022
Fulbright-Nokia Distinguished Chair, *Computer Science, Aalto University, Espoo, Finland*   2021 – 2022
Visiting Research Faculty, *Indian School of Business, Hyderabad, India*   2010
Researcher-in-Residence, *Microsoft Research Labs, Bangalore, India*   2010
Visiting Researcher**,** *Information Systems, University of Siegen, Germany*   2006
Research Intern, *HCI Group, FXPAL, Palo Alto, CA*   2005
Software Engineer, *Wipro Systems, Bangalore, India*   1998 - 1999

Education

Ph. D. Stanford University, Palo Alto, CA   2007
  Learning Sciences and Technology Design

MFA George Mason University, Fairfax, VA   2019
  Creative Writing (Nonfiction)

M.S. Georgia Institute of Technology, Atlanta, GA   2002
  Information, Design, and Technology

M.A. University of Georgia, Athens, GA   2000
  Mass Communication

Bachelor of Engineering, Delhi College of Engineering, Delhi, India   1998
  Mechanical Engineering

Honors and Awards

[A36] AERA Division I Outstanding Research Publication Award (ORPA): Book 2024 for *International Handbook of Engineering Education Research* (IHEER), April 2024.

[A35] Best Paper Award Nominee, HICSS 2024 (with Ashish Hingle)

[A34] 2023 GMU Nominee for Outstanding Faculty Award (OFA) sponsored by State Council for Higher Education in Virginia (SCHEV). OFA recognizes and rewards excellence in teaching, research and scholarship, and public service and is the highest honor a faculty member in Virginia can receive.

[A33] Top 2% of researchers in the field globally for both career and single-year impact (Stanford University and Elsevier Standardized Citation Indicators [2024, 2023, 2022, 2021], DOI: 10.17632/btchxktzyw.7)

[A32] Honorable Mention Best Poster (with Ashish Hingle) IEEE Ethics Conference 2023 organized by IEEE Society on Social Implications of Technology (SSIT), Purdue University, West Lafeyette, May 2023.

[A31] 2022 University Teaching Excellence Award, George Mason University; a university-wide award for exemplary dedication to High-Impact learning, and commitment to educational excellence.

[A30] 2022 Mentoring Excellence Award, Office of Student Scholarship, Creative Activities & Research (OSCAR), George Mason University; recognizes exceptional research mentoring of undergraduate students and fostering a culture of student scholarship at Mason.

[A29] Fulbright-Nokia Distinguished Chair in Information and Communication Technologies 2021-2022.

[A28] Fulbright Specialist Roster 2021-2025.

[A27] Summer 2021, Spring 2021, Fall 2020 Recognition for Outstanding Teaching of a Mason Core Course in IT Ethics (above a 4.75 out of 5 on "My overall rating of teaching" from Student Ratings of Instruction).

[A26] Best Full Paper Award, International Conference of Web-based Learning (ICWL) 2019, Magdeburg, Germany, September 2019 (with B. Chowdhury, D. Kafura & V. Lohani).

[A25] Honorable Mention, Glimmer Train's Short Story Award for New Writers, 2019.

[A24] 2019 Alan Cheuse Fiction Award, George Mason University.

[A23] Nominated for 2017 Career Connection Faculty Award (Awarded by University Career Services; students nominate faculty for this award).

[A22] AERA Division I Outstanding Research Publication Award (ORPA): Book 2015 for *Cambridge Handbook of Engineering Education Research* (jointly with Barbara M. Olds), April 2015.

[A21] 2013 Virginia Tech's Center for Innovation in Learning's XCaliber Certificate of Excellence for a team making exemplary contributions to Technology-Enriched Learning (jointly with Akshay Sharma).

[A20] Engineering Dean's <u>Faculty Fellow Award for Extraordinary Performance in Research 2013-2015</u>, College of Engineering, Virginia Tech.

[A19] <u>Finalist, 2013 Virginia Outstanding Faculty Award (Category: Rising Star)</u> awarded by the State Council for Higher Education in Virginia (SCHEV). Only one nomination per academic institution is allowed; Top 25% of nominations were finalists (5 out of 20) in this category.

[A18] Best Paper Nomination, Computers in Education Division, Annual Conference of American Society of Engineering Education, San Antonio, TX, June 2012.

[A17] Winner, Design for All Foundation Awards 2012, Non-profit Category, Entry: "Immune – A Cell Phone Based Vaccination System" (jointly with Akshay Sharma).

[A16] Finalist, World Design Impact Award 2012, International Council of Societies of Industrial Design (ICSID), Entry: "Bahikhaata, A Financial Literacy Tool" (jointly with Akshay Sharma).

[A15] Selected to participate in competitive National Academy of Engineering's Frontiers of Engineering Education (FOEE) Symposium, Nov. 13-16, 2011, Irvine, CA.

[A14] Recognized by Virginia Tech's Office of the Vice President for Research as "Virginia Tech Scholar of the Week" for the week of June 27, 2011.

[A13] Selected to participate in competitive NSF-sponsored 2011 Summer Research Institute for the Science of Socio-Technical Systems (CSST'11), June 5-9, Captiva Island, FL (~30% applicants selected).

[A12] Best Note Award, ACM Conference on Computer Supported Cooperative Work (CSCW), March 2011, Hangzhou, China (Awarded to top 1% or 3 out of 268 submissions).

[A11] Virginia Tech College of Engineering Dean's Award for <u>Outstanding New Assistant Professor</u> in Recognition of Extraordinary Performance, 2010.

[A10] <u>National Science Foundation Early CAREER Award 2009</u>.

[A9] New Faculty Fellow Award, National Academy of Engineering (CASEE), Frontiers in Engineering Conference, October 2008, Saratoga Springs, NY. (Nine out of 30 applicants selected)

[A8] Best faculty paper proposal award, "Cognition in the Rough" PDW, MOC Division, Academy of Management, 2008 (Top proposal out of 54 proposals).

[A7] Selected to Participate in Competitive NSF Cyberinfrastructure & Engineering Education Workshop, Included Travel Grant (09/04/08-09/05/08).

[A6] Selected to Participate in Competitive Junior Faculty Consortium, Organizational Communication and Information Systems (OCIS) Division, Academy of Management, 2008, Sponsored by NSF, Fellowship Amount: $1,000

[A5] Selected to Participate in Competitive Junior Faculty Consortium, International Conference of Learning Sciences, Utrecht, the Netherlands, 2008, Sponsored by NSF, Fellowship Amount: $1,000

[A4] Doctoral Consortium Fellowship, International Conference of Learning Sciences, Bloomington, IN, 2006. Sponsored by NSF, Fellowship Amount: $500

[A3] Doctoral Consortium Fellowship, Computer Supported Collaborative Learning, Taipei, Taiwan, 2005. Sponsored by NSF, Fellowship Amount: $2,500

[A2] 1st Place at Stanford Social e-Challenge Business Plan Competition, 2003 (Project: e-Immunization); the project was later prototyped in AP, India and won the 9th e-Governance Award in 2006.

[A1] Stanford University School of Education Quillen Fellowship & Research Award 2002-03.

Grants

Total External Funding (including collaborative): ~$35 million; Personal Share: ~$4.5 million; PI on 18 NSF awards/contract; Co-PI on 5 NSF awards; Senior Personnel on 3 NSF Awards.

External Grants

Current
[G28] NSF-SaTC-2335636: Education DCL: EAGER: An Embedded Case Study Approach for Broadening Students' Mindset for Ethical and Responsible Cybersecurity.
Role: PI, Co-PIs: V. Motti and K. Islam, Amount: $299,486, 2024-2026.

[G27] NSF-EEC-2319137: EAGER: Impact of Generative Artificial Intelligence (GAI) on Engineering Education Practices.
Role: PI, Co-PI: Nora McDonald, Amount: $300,000, 2023-2025

[G26] NSF-EEC-2112775: Workshop: ProVis-EER: Developing Professional Vision into Empirical Practices within Engineering Education Research (EER) though Digital Apprenticeship.
Role: PI: Amount: $99,647, 2021-2023.

[G25] USDA-NIFA/NSF Award #2021-67021-35329: AI Institute for Resilient Agriculture (AIIRA)
Role: SP/Team Co-Lead; PI: B. Ganapathysubramanian, Iowa State; Total Award Amount: $20M Personal Share: $500,000 (2021-2026)

[G24] NSF-CNS-1954556: CPS: Frontier: Collaborative Research: COALESCE: Context Aware Learning for Sustainable Cyber-Agricultural Systems.
Role: Co-PI; PI: S. Sarkar, Iowa State; Co-PIs: A. Singh (ISU), B. Ganapathysubramanian (ISU), N. Merchant (UoA); USDA/NIFA, lead institution: UIUC (PI: G. Chowdhary); Total Amount: $7M; Personal Share: $400,000 (2021-2026)

[G23] NSF-DUE-2044347: Studying Student Support and Success Experiences to Improve Persistence of Nontraditional Students in Engineering.
Role: Senior Personnel (External); PI: Cory Brozina, Youngstown State University; Total Amount: $299,968 (Share: $34,500) (2021-2024)

Completed

[G22] NSF-DUE-1937905: Situated Algorithmic Thinking: Preparing the Future Computing Workforce for Ethical Decision-Making through Interactive Case Studies.
Role: PI; Co-PIs: Huzefa Rangwala, Alex Monea; Amount: $299,989 (2020-2024); REU Supplement: $67,000 (2021-2024)

[G21] NSF-EEC-1939105: Collaborative EAGER: Novel Ethnographic Investigations of Engineering Workplaces to Advance Theory and Research Methods for Preparing the Future Workforce.
Role: PI; Amount: $80,582 (Collaborative with Purdue (Lead PI: Brent Jesiek) and YSU (PI: Cory Brozina), Total Amount: $300K. (2020-2023)

[G20] CRA/CCC/NSF Computing Innovation Fellows Program (PI and Mentor), Award Amount: $270,000, 2022-2024. (*Fellowship was awarded but not availed by candidate*)

[G19] NSF-EEC-1941186: Workshop: Building an Inclusive Foundation of Engineering Education Research Scholarship for Future Growth.
Role: PI; Amount: $99,933 (2020-2022)

[G18] NSF-REU-1757064: REU Site: Undergraduate Research in Educational Data Mining.
Role: Senior Personnel; PI: Huzefa Rangwala; Award Amount: $359,982 (2018-2021)

[G17] NSF-DUE-IUSE-1712129: Deeper Learning of Data Science (DLDS): Studying Real-world Experiences of Engineering Professionals to Prepare the Future Workforce.
Role: PI; Amount: $300,000 (2017-2021)

[G16] NSF-DUE-1707837: EAGER: Social Media Participation as Indicator of Actors, Awareness, Attitudes, and Activities Related to STEM Education.
Role: PI, Amount $299,292. Co-PI: Hemant Purohit (2017-2020)

[G15] NSF-IIS-CHS-1733634: RAPID: Collaborative Research: Technology Adoption during Environmental Jolts: Mobile Phone Use and Digital Services Appropriation during India's Demonetization Crisis.
Role: PI; $49,974. (Collaborator: Joyojeet Pal, University of Michigan; Total Amount $100K) (2017-2018)

[G14] NSF-BIGDATA: IA: DKA (IIS#1447489): Collaborative Research: Learning Data Analytics: Providing Actionable Insights to Increase College Student Success.
Role: Co-PI; PI: Huzefa Rangwala; Co-PIs: Jaime Lester; Award Date: 2014-2018; Award Amount: $776,202.00

[G13] NSF-EEC-1408674: EAGER: Collaborative Research: Data Ecosystems for Catalysing Transformative Research in Engineering Education.
Role: PI; Amount: $168,500K (including REU Supplement: $18.5K) (2014-2016)

[G12] NSF-EEC-1424444: TILES: Trajectories of Informal Learning Among Engineering Students.
Role: PI; Co-PIs: Lori Bland, Khondkar Islam, Akhsay Sharma (VT), $460,000 (including REU Supplement: 10K) (2014-2018).

[G11] NSF-DUE-1444277: Deep Insights Anytime, Anywhere (DIA2) - Central Resource for Characterizing the TUES Portfolio through Interactive Knowledge Mining and Visualizations.

Role: PI, Co-PIs: Carlotta Domeniconi (GMU), Naren Ramakrishana (VT), Alan Wang (VT). Total Amount: $3.2 Million (Collaborators: Purdue, Stanford & ASU); Share: $722, 251. (2014-2017).

[G10] NSF-ACI-1355955: EAGER: Kinetic Computing Sculpture: A functional parallel cluster of Raspberry Pi computers that inspire computational thinking.
Role: Co-PI; PI: Kirk Cameron; Amount: $181,395.   (2013-2015)

[G9]   NSF-EEC-0954034: Early CAREER Award -Investigating Global Engineering Work Practices to Prepare 21st Century Engineers.
Role: PI, Amount: $406,987; *50,000 supplement by VT COE*; (2010-2014).

[G8] NSF-DUE-TUES, Advancing Personalized Engineering Learning Via an Adaptive Concept Map.
Role: Co-PI; PI: Chris Williams, Amount: $198, 753. (2011-2014).

[G7]   NSF-EEC-0935124: Collaborative Research: Interactive Knowledge Networks for Engineering Education Research.
Role: PI; Co-PI: G. Alan Wang; Total Amount: $400K, VT: $132,474. (2010-2012)

[G6]   NSF Cooperative Agreement Project (Contract): Understanding the impact of NSF CCLI (Engineering) Investments. Sponsor: NSF. Amount: $25,000.
Role: PI. Collaborative project with Purdue (PI: Krishna Madhavan); Funding was with Purdue University. (2010).

[G5] NSF-EEC-0835892: AdWiki: Cultivating a Wiki-Based Online Community of Practice for Advising Engineering Students.
Role: PI; Co-PI: Jenny Lo, Amount: $99,927 (2008-2010)

[G4] NSF-IIS-0757540: Examining Creativity with IT in Engineering Design (X-CITED).
Role: PI, Co-PIs: Deborah Tatar, Vinod Lohani, Amount: $209,641 (2008-2011)

[G3] NSF-EEC-0935143: Collaborative Proposal (IEECI Exploratory): Identifying Practices and Tools to Promote Newcomer Participation in Cyberlearning Environments.
Role: PI, Total: $200K, VT: Amount: $99,401. (2009-2010)

[G2]   NSF-EEC-0832002: Building Connections within the Engineering Education Research Community.
Role: Co-PI; PI: Lisa McNair, Amount: $367,154 (2008-2010)

[G1] NSF-EEC-BRIGE-0824337: Investigating Engineering Student Identity Formation,
Role: Senior Personnel (External), PI: Olga Pierrakos; Amount: $174,643; Share: $10,000 (2008-2012)

Internal Grants

Current
[IG12] Mentoring for Anti-Racism and Inclusive Excellence (MARIE) program funding for the project "Students' Recognition of ARIE and FATE in AI – Within and Beyond the Classroom," Lead PI: Doctoral advisee Ashish Hingle
Role: Mentor; Total: $11,500

Completed

[IG11] Stearns Center/ARIE Course Improvement Grant "Revision of IT 304" with Nupoor Ranade. (2022-2023)
    Role: PI; Total: $16,500

[IG10] Provost Curriculum Improvement Grant in "Computing, Engineering, and Science Education" co-lead with Jill Nelson. (2018-2019)
    Role: Co-PI; Total: $22,000

[IG9] Faculty Learning Community (FLC) in Engineering Education, Stearns Center for Teaching and Learning. (2018-2019)
    Role: PI; Co-PI: Jaime Lester, Nada Dabbagh, Margret Hjalmarson, Total: $3,500

[IG8] 4-VA Initiative Grant "Mechanical Objects and the Engineering Learner: An Experimental Study of How the Presence of Objects Affects Students' Performance on Engineering Related Tasks," (2015-2016)
    Role: Co-PI; PI: Diana Bairaktarova, Virginia Tech; Total: $30,000; GMU Portion: $5,000

[IG7] "Bio-Inspired Visualization and Analysis of Dynamic Behaviors in Online Learning Communities", Sponsor: Institute for Creativity, Art, and Technology, Virginia Tech, PI: Yong Cao, Role: Collaborator. Amount $8,958. Period 01/01/2014 – 04/30/2014

[IG6] VT College of Engineering Dean's Faculty Fellow, $5,000 per annum for three years (Availed for 2013)

[IG5] Pratt Fellowship for International Research; Sponsor: Virginia Tech College of Engineering.
    Role: PI (100%); Date: August 2010 – May 2011. Amount: $6,000.

[IG4] Small Grant for Exploratory Research; Sponsor: Virginia Tech Office of International Research, Education, and Development.
    Role: PI; Date: 2009-2010. Amount: $2,500,

[IG3] Virginia Tech Knowledge Networks; Sponsor: Institute for Critical Technology & Applied Sciences, Virginia Tech.
    Role: PI; Co-Investigator: Wang, G. A.; Dates: 2008-2009, Amount: $35,000.

[IG2] MediaX at Stanford, "Impression Formation in Distributed Teams," PI: P. Hinds; Amount: $45,000. Assisted with proposal writing and this grant funded my dissertation research; Date: 2005-2006.

Industry Sponsorship
[IG1] Sun Microsystems Unrestricted Grant, Amount: $10,000; Role: PI; Date: August 2009 – May 2010.

Invited Presentations/Talks

[I42] **Johri**, A. (2024). Ethics of AI in Learner-Centric Education. Invited Panel Discussion, T4E/COMPUTE 2024, IIT Gandhinagar, Dec. 7, 2024, with A. Gupta, R. Rajendran, R. Jogeshwar, and S.Grover.

[I41] **Johri**, A. (2024). Creating and Using Role-Play Case Studies to Teach Computing Ethics. ISTEP, University of Toronto, Feb. 13, 2024.

[I40] **Johri**, A. (2024). Conducting Engineering Education Research that Matters. Keynote Presentation, REES 2024, January 6, 2024, Hubli, India (Online).

[I39] **Johri**, A. (2023). Capacity Building for Engineering Education Research (EER) in the U.S. (2003-2023). Keynote Presentation, 18th International Symposium of the Chinese Society of Engineering Education, December 8, 2023, Hangzhou, China (Online).

[I38] **Johri**, A. (2023). The Future of Engineering Education Research. Plenary Keynote Panel at SEFI 2023 with B. Williams, J. Mitchell, D. Martin & K. Edstrom, September 11, 2023, Dublin, Ireland.

[I37] **Johri**, A. (2023). International Handbook of Engineering Education Research. Roundtable at 5th International Conference of Portuguese Society of Engineering Education, Guimarães, Portugal, July 6, 2023 (Online).

[I36] **Johri**, A. (2022). Review of engineering education research with implications for teaching and learning. School of Engineering, Aalto University, Espoo, Finland, October 13, 2022.

[I35] **Johri**, A. (2022). Artificial Intelligence (AI), Human Cognition, and an Ethical Society. Department of Mechanical Engineering, Auburn University, September 9, 2022.

[I34] **Johri**, A. (2022). AI, Ethics, and Higher Education. Invited panel presentation at Center for Engineering Education, University College of London, July 19, 2022.

[I33] **Johri**, A. (2022). New Modes of Cooperation in the (New) Global South. Invited panel presentation at the 25 years of Socio-Informatics Conference, Siegen, Germany, June 10, 2022.

[I32] **Johri**, A. (2022). AI, Ethics, and Human Cognition. Institute for Ethics in AI (IEAI) Seminar Series, Munich, Germany, May 30, 2022.

[I31] **Johri**, A. (2022). AI Ethics, Human Cognition, and Society. Hochschule Magdeburg-Stendal, Magdeburg, Germany, May 12, 2022.

[I30] **Johri**, A. (2022). Do Algorithms Run the World? Osher Lifelong Learning Institute GMU and AARP VA, February 18, 2022. (virtual)

[I29] **Johri**, A. (2021). Lifelong and Lifewide Learning in Engineering. KTH Stockholm, December 6, 2021.

[I28] **Johri**, A. (2021). Editing Engineering Education Research Handbooks and Institutionalizing an Academic Field. KTH Stockholm, December 3, 2021.

[I27] **Johri**, A. (2021). Instructional Design in Engineering: Designing Engineering Education Programs for Continuous Improvement. ENACT Project, University of Tampere, December 3, 2021. (virtual)

[I26] **Johri**, A. (2021). Artificial Intelligence (AI), Human Cognition, and Ethics. CRAI-CIS Seminar Series, Department of Computer Science, Aalto University, Finland, November 24, 2021.

[I25] **Johri**, A. (2021). Artificial Intelligence (AI), Ethics, and Society: Implications for Education. Tallinn University of Technology, Tallinn, Estonia, November 5, 2021.

[I24] **Johri**, A. (2021). A Socio-Cognitive Exploration of AI Ethics with Implications for Practice. AI Governance and Auditing (AIGA) Consortium, University of Turku, Finland, October 28, 2021.

[I23] **Johri**, A. (2021). AI Ethics Education and the Moral Imagination of Educators. TU Eindhoven, Eindhoven, the Netherlands, October 13, 2021.

[I22] **Johri**, A. (2021). All Tech is Human. American Voices Seminar, Fulbright Finland Foundation and University of Turku, Finland, October 8, 2021.

[I21] **Johri**, A. (2021). AI Ethics: A Socio-Cognitive Exploration. Nokia/Nokia Foundation, Finland (Virtual), October 5, 2021.

[I20] **Johri**, A. (2021). AI-Augmentation and Implications for AI & Society. Finnish Center for Artificial Intelligence (FCAI) Retreat on AI & Society, August 26, 2021. (virtual)

[I19] **Johri**, A. (2021). Interactive Role-Play Case Studies for Teaching Ethics. SEFI Ethics Seminar, March 4, 2021. (virtual)

[I18] **Johri**, A. (2020). A Learning Ecology Perspective on Using Technology for Education. At International Webinar on Digitilization in Higher Education, June 13, 2020. Padmashree Institute of Management and Sciences, Bengaluru, India. (virtual)

[I17] **Johri**, A. (2019). AI-Augmented Engineering Education. Department of Engineering Education, Virginia Tech, November 1, 2019.

[I16] **Johri**, A. (2019). Informal Engineering Learning in Online Communities. Center for Teaching and Learning, Technical University, Hamburg, October 1, 2019.

[I15] **Johri**, A. (2019). Materiality Matters: Technology and Engineering Education. Keynote Address at Research in Engineering Education Symposium (REES) 2019, Cape Town, South Africa.

[I14] **Johri**, A. (2019). More Than an Engineer: Intersectional Self-Expressions in a Hashtag Activism Campaign for Engineering Diversity, February 2019, Purdue University, Engineering Education Seminar.

[I13] **Johri**, A. (2019). How Diverse Users and Activities Trigger Connective Action via Social Media: Lessons from the Twitter Hashtag Campaign #ILookLikeAnEngineer, January 2019, IIT-Delhi.

[I12] **Johri**, A. (2012). "Designed Transparency: Can Information Technology Reduce Corruption in Emerging Economies," HCI Seminar Series, Center for Human-Computer Interaction, Virginia Tech.

[I11] **Johri**, A. (2012). Designed Transparency: Can ICT Reduce Corruption? (February 2012), Telecommunication, Information Studies, and Media, Michigan State University, East Lansing, MI.

[I10] **Johri**, A. (2012). Practicing Global Engineering: A Research, Education and Outreach Challenge. (January 2012), Center for Engineering Education and Outreach, Tufts University, Boston, MA.

[I9] Madhavan, K.P.C., Xian, H., Vorvoreanu, M., **Johri**, A., Jesiek, B., Wang, A., & Wankat, P. (2010). The FIE Story - 1991 to 2009.² Invited video presentation featured at the Frontiers in Education Conference 2010. Available online at http://www.youtube.com/watch?v:bKA4zJc3bsA. (October 2010).

[I8] **Johri**, A. (2010). Engineering and Development: Values and Design. Presented at Microsoft Research Labs, Bangalore, India, September 2010.

[I7] **Johri**, A. (2010). Computational Literacy: The Reshaping of Human Practices through Digital Representations. School of Education and Social Policy, Northwestern University, Chicago, IL, February 9, 2010.

[I6] **Johri**, A. (2007). Innovation in a Flat and Networked World. GENENCOR Inc. Palo Alto, CA, July 10, 2007.

[I5] **Johri**, A. (2006). Mediated Impressions: How Digital Technology Affects Impression Formation and Shapes Collaboration and Learning. SUNY Albany, December 2006.

[I4] **Johri**, A. (2006). Technology and Collaboration in R&D Laboratories. Microsoft Research Labs, Bangalore, India, September 2006.

[I3] **Johri**, A. (2006). Graduate Education in the U.S. Presented at the Annual Retreat of the Department of New Media and Information Systems, University of Siegen, Germany, August 2006.

[I2] **Johri**, A. (2006). Interpersonal Impression Formation in a Community of Practice. University of Siegen, Germany, July 2006.

[I1] **Johri**, A. (2005). Understanding Impression Formation and Impression Accuracy Among Distributed Coworkers. Fraunhofer FIT, Sankt Augustin, Germany, August 2005.

Publications*

53 Journal Articles, 136 Refereed Conference Proceedings Papers/Posters, 2 Co-authored Books, 3 Co-edited Books, 4 Co-edited/Edited Journal Special Issues & 17 Book Chapters.

Electronic copies of select publications: http://mason.gmu.edu/~johri/publications and http://bit.ly/1J2auoo

Google Scholar Profile: http://bit.ly/1GllyIT

Edited Books
[EB3] **Johri**, A. (Ed.) (2023). *International Handbook of Engineering Education Research*. Routledge, New York, NY.
 (Awarded Best Publication for Books in 2023-2024 by American Educational Research Association (AERA) Division I 'Education in the Professions')

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* **Underlined** authors denote students or postdocs funded by a grant on which I was PI or co-PI; * Denotes direct advisees. All proceedings papers were also presented at the conference. In case of equal contribution, the norm in my lab is to give students and postdocs first authorship. In equal collaboration with junior faculty, they get a higher ranked authorship than me but lower than students.

[EB2] Lester, J., Klein, C., **Johri**, A., & Rangwala, H. (Eds.) (2018). *Learning Analytics in Higher Education: Current Innovations, Future Potential, and Practical Applications*. Routledge, NY.

[EB1] **Johri**, A. & Olds, B. (Eds.) (2014). *Cambridge Handbook of Engineering Education Research*. Cambridge University Press, New York, NY.
(Awarded Best Publication for Books in 2014-2015 by American Educational Research Association (AERA) Division I 'Education in the Professions')

Books
[B2] Lester, J., Klein, C. Rangwala, H. & **Johri**, A. (2017). *Learning Analytics in Higher Education*. ASHE Monograph Series, Vol. 3, Issue 5.

[B1] **Johri**, A. & Sharma, A. (2013). *Designing Development: Case Study of an International Education and Outreach Program*. Morgan & Claypool Press, San Rafael, CA.

Journal Special Issues Edited
[JE4] **Johri**, A., Vorvoreanu, M. & Madhavan, K. (2016). Data Sharing in Engineering Education. Special Issue of *Advances in Engineering Education*, Spring 2016.

[JE3] **Johri**, A., Roth, W-M. & Olds, B. (2013). Representations and Engineering Learning. Special issue of *Journal of Engineering Education*, 6 articles.

[JE2] **Johri**, A. (2011). Global, Technological, and Environmental Challenges in Engineering. Introduction to theme issue of *Engineering Studies*. August 2011, 3 articles**.**

[JE1] **Johri**, A. (2010). Situated Engineering and the Workplace. Introduction to theme issue of *Engineering Studies*, Dec. 2010, 4 articles.

Journal Articles

2025
[J53] Nofal, A., Ali, H., Hadi, M., Ahmad, A., Qayyum, A., **Johri**, A., Al-Fuqaha, A., & Qadir, J. (2025). AI-enhanced interview simulation in the metaverse: Transforming professional skills training through VR and generative conversational AI. *Computers and Education: Artificial Intelligence*, Volume 8, 100347 https://doi.org/10.1016/j.caeai.2024.100347.

2024
[J52] Brozina, C., **Johri**, A. & Chew, A. (2024) A systematic review of research on nontraditional students reveals inconsistent definitions and a need for clarity: focus on U.S. based studies. *Frontiers in Education*. 9:1434494. doi: 10.3389/feduc.2024.1434494

[J51] Hingle, A. & **Johri**, A. (2024). A Framework to Develop and Implement Role-Play Case Studies to Teach Responsible Technology Use. *IEEE Transactions on Technology and Society.* doi: 10.1109/TTS.2024.3408085

[J50] Ranade, N., Saravia, M. & **Johri**, A. (2024). Using rhetorical strategies to design prompts: a human-in-the-loop approach to make AI useful. *AI & Society*. https://doi.org/10.1007/s00146-024-01905-3

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[P135] Dewan, U., *Hingle, A., McDonald, N. & **Johri**, A. (2025). Educators' Perspectives on the Impact of Generative AI in Higher Education. *Proceedings of IEEE EDUCON 2025.*

[P134] *Ali, A. Collier, A., Dewan, U., McDonald, N. & **Johri**, A. (2025). Analysis of Generative AI Policies in Computing Course Syllabi. *Proceedings of ACM SIGCSE 2025.*

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[P133] *Hingle, A. & **Johri**, A. (2024). Expanding AI Awareness Through Everyday Interactions with AI: A Reflective Journal Study. *Proceedings of FIE 2024.*

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[P131] *Schleiss, J. & **Johri**, A. (2024). A Roles-based Competency Framework for Integrating Artificial Intelligence (AI) in Engineering Courses. *Proceedings of SEFI 2024.*

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2023

[P125] Chew, A., Brozina, C. & **Johri**, A. (2023). A Transactional Perspective on Non-Traditional Students in Engineering. *Proceedings of FIE 2023.*

[†] ***Note on Conference Acceptance Rates***:

Information and Computer Science Conferences: Acceptance rates for ACM conferences range between 20-35% for full/short papers and ~50% for Extended Abstracts. Full and short papers in proceedings are considered journal equivalent publications in the field. IEEE HICSS acceptance rate is around 40-50% (it is the most highly cited IEEE conference).

Learning Sciences Conferences: Acceptance rate for ICLS and CSCL conferences ranges between 30-55%. Full papers in their proceedings are considered journal equivalent publications in the field.

Engineering Education Conferences: The "Submit-to-Publish" acceptance rate for ASEE and FIE is around 50-60% i.e., of the initial N number of abstracts submitted, 50-60% are accepted as full papers after two rounds of review.

[P124] *Hingle, A., Katz, A. & **Johri**, A. (2023). Exploring NLP-based Methods for Generating Engineering Ethics Assessment Qualitative Codebooks. *Proceedings of FIE 2023*.

[P123] *Mehta, S., *Hingle, A. & **Johri**, A. (2023). Teaching Multidimensional Ethical Decision-Making Through a Role-Play Case Study. *Proceedings of FIE 2023*.

[P122] **Johri**, A., Lindsay, E. & Qadir, J. (2023). Ethical Concerns and Responsible Use of Generative Artificial Intelligence in Engineering Education. *Proceedings of SEFI 2023*.

[P121] *Mehta, S., *Hingle, A. & **Johri**, A. (2023). Developing Perspectival Thinking Related to Sustainability through Case Study Discussions. *Proceedings of SEFI 2023*.

[P120] Jesiek, B., Brozina, C., Korte, R. & **Johri**, A. (2023). Investigating Engineering Practice Using Ethnographic Methods: Experiences of Student Observers at Multiple Field Sites. *Proceedings of ASEE 2023*.

[P119] Brozina, C., Korte, R., Jesiek, B. & **Johri**, A. (2023). Mediation and Maintenance in Engineering Professional Work Practices: Findings from a Utility Company. *Proceedings of ASEE 2023*.

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[P116] Katz, A., Brozina, C., **Johri**, A., & Shuman, L. (2022). Analysis of *Advances in Engineering Education* Publications (2007-2020) to Examine Impact and Coverage of Topics. *Proceedings of FIE 2022*.

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[P114] *Chowdhury, B., Kafura, D. & **Johri**, A. (2022). When Does Collaborative Interaction Support Learning of Computational Thinking Among Undergraduate Students. *Proceedings of FIE 2022*.

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[P110] *Hingle, A., **Johri**, A. & Brozina, C. (2022). Instructing First-Year Engineering Students on the Ethics of Algorithms through a Role-Play. *Proceedings of ASEE 2022*.

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[P109] Le, H. & **Johri**, A. (2021). Engineers' Situated Use of Online Resources to Augment their Workplace Learning Ecology. *Proceedings of IEEE/ERM Frontiers in Education, 2021.*

[P108] *Karbasian, H. & **Johri**, A. (2021). Keeping Curriculum Relevant: Identifying Longitudinal Shifts in Computer Science Topics through Analysis of Q&A Communities. *Proceedings of IEEE/ERM Frontiers in Education, 2021.*

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[P105] Martin, D., Bombaerts, G. & **Johri**, A. (2021). Ethics is a disempowered subject in the engineering curriculum. *Proceedings of SEFI 2021.*

[P104] **Johri**, A. (2021). ICT for Education and Learning in the Context of Development: A Review of the ICTD Literature. *Proceedings of ACM Conference of IT for Social Good (GoodIT) 2021.* (***Acceptance Rate: 32%***)

[P103] *Karbasian, H., Purohit, H. & **Johri**, A. (2021). Improving Diversity in Engineering: A Data-driven Approach to Support Resource Mobilization and Participation in Hashtag Activism Campaigns. *Proceedings of ACM Hypertext & Social Media 2021.* (***Acceptance Rate: 36%***)

[P102] *Hingle, A., **Johri**, A., Rangwala, H. & Monea, A (2021). Using the Boeing Max Air Disaster as A Role-Play Scenario for Teaching Ethical Thinking. *Proceedings of ASEE Annual Conference 2021.*

2020
[P101] Jesiek, B., **Johri**, A., Brozina, C. & Korte, R. (2020). Work-in-Progress: Novel Ethnographic Investigations of Engineering Work Practices. *Proceedings of ASEE 2020.*

[P100] *Karbasian, H. & **Johri**, A. (2020). Insights for Curriculum Development: Identifying Emerging Data Science Topics through Analysis of Q&A Communities. *Proceedings of ACM Special Interest Group on Computer Science Education (SIGCSE 2020).* (***Acceptance Rate: 31.4%***)

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[P99] *Chowdhury, B., **Johri**, A., Lohani, V. & Kafura, D. (2019). Be Constructive: Learning Computational Thinking Using Scratch™ Online Community. *Proceedings of International Conference of Web-based Learning (ICWL 2019).* (***Acceptance Rate: 25%***) **(Best Paper Award)**

[P98] Brozina, C. & **Johri**, A. (2019). Engineering Time: A Learning Analytics Initiative to Understand Time Management of First-year Engineering Students. *Proceedings of ASEE 2019.*

[P97] *Le, H., **Johri**, A., & *Malik, A. (2019). Curating Tweets: A Framework for Using Twitter for Workplace Learning. *Proceedings of ASEE 2019.*

[P96] Krishnan, N., **Johri**, A., Chandrasekaran, R. & Pal, J. (2019). Cashing Out: Digital Payments and Resilience Post-demonetization. *ACM Proceedings of ICT for Development.* (***Acceptance Rate: ~25%***)

2018

[P95] Pandey, R., Purohit, H., Chan, J., and **Johri**, A. (2018). AI for Trustworthiness! Credible User Identification on Social Web for Disaster Response Agencies. *AAAI 2018 Fall Symposium Series*.

[P94] **Johri**, A. (2018). Lifelong Learning Ecology of FLOSS: Participatory and Personalized Learning Over Time and Space. *Proceedings of ACM OpenSym Conference on Open Collaboration 2018.*

[P93] **Johri**, A. & *Teo, H. J. (2018). Achieving Equilibrium through Coworking: Work-Life Balance in FLOSS through Multiple Spaces and Media Use. *Proceedings of ACM OpenSym Conference on Open Collaboration 2018.*

[P92] *Malik, A., **Johri**, A., Handa, R., *Karbasian, H. & Purohit, H. (2018). #EngineersWeek: Broadening our Understanding of Community Engagement through Analysis of Twitter Use during the National Engineers Week. *Proceedings of 125th ASEE Annual Conference, Salt Lake City, USA.*

[P91] *Le, H., **Johri**, A. & *Malik, A. (2018). A Situated Information Perspective on Engineering Workplace Learning: A Case Study of Cybersecurity Professionals. *Proceedings of 125th ASEE Annual Conference, Salt Lake City, USA.*

[P90] **Johri**, A., *Heyman-Schrum, C., *Ruiz, D., *Malik, A., *Karbasian, H., Handa, R., & Purohit, H. (2018). More Than an Engineer: Intersectional Self-Expressions in a Hashtag Activism Campaign for Engineering Diversity. *Proceedings of ACM COMPASS*. **(Acceptance Rate: 28.5%)**

[P89] *Malik, A., Johri, A., Handa, R., *Karbasian, H. & Purohit, H. (2018). #ILookLikeAnEngineer: Using Social Media Based Hashtag Activism Campaigns as a Lens to Better Understand Engineering Diversity Issues. *Proceedings of ASEE CONECD Conference, Crystal City, VA, USA.*

[P88] Pal, J., Chandra, P., Kameswaran, V., Parameshwar, A., Joshi, S. & **Johri**, A. (2018). Digital Payment and its Discontents: Street shops and the Indian Government's Push for Cashless Transactions. *Proceedings of CHI 2018*. (*Acceptance Rate: 25%*)

[P87] Chen, Y., **Johri**, A. & Rangwala, H. (2018). Running Out of STEM: A Comparative Study across STEM Majors of College Students At-Risk of Dropping Out Early. *Proceedings of Learning Analytics and Knowledge (LAK)*. (*Acceptance Rate: 30%*)

[P86] Karbasian, H., Purohit, H., Handa, R., Malik, A. & **Johri**, A. (2018). Real-Time Inference of User Types to Assist with more Inclusive and Diverse Social Media Activism Campaigns. *Proceedings of AAAI AIES 2018*. (*Acceptance Rate: 37%*)

[P85] **Johri**, A., *Karbasian, H., *Malik, A., Handa, R. & Purohit, H. (2018). How Diverse Users and Activities Trigger Connective Action via Social Media: Lessons from the Twitter Hashtag Campaign #ILookLikeAnEngineer. *Proceedings of HICSS 2018*. (*Acceptance Rate: 50%*)

2017

[P84] **Johri**, A. & *Yang, S. (2017). Scaffolded Help for Informal Learning: How Experts Support Newcomers' Productive Participation in an Online Community. *Proceedings of Communities and Technologies (C&T) 2017*. **(Acceptance Rate: 50%)**

[P83] Bland, L., Xu, X., *Kusano, S. & **Johri**, A. (2017). The Development of Engineering Students' Metacognitive Skills in Informal Engineering Learning Activities. *Proceedings of ASEE Annual Meeting*.

[P82] Bland, L., Xu, X., *Kusano, S. & **Johri**, A. (2017). Examining Learner-driven Constructs in Co-curricular Engineering Environments: The Role of Student Reflection in Assessment Development. *Proceedings of ASEE Annual Meeting*.

[P81] **Johri**, A. (2017). Situated Cognition Genres: A Situated Learning Approach for Examining Informal Learning in an Online Community of Makers. *Proceedings of ASEE Annual Meeting*.

[P80] Almatrafi, O., **Johri**, A., Rangwala, H. & Lester, J. (2017). Retention and Persistence among STEM Students: A Comparison of Direct Admit and Transfer Students across Engineering and Science. *Proceedings of ASEE Annual Meeting*.

[P79] Pal, J., Viswanathan, A. & **Johri**, A. (2017). Mediating Access: How Visually-Impaired Users Leverage Collaborative Learning to Keep Up with Mobile Phone Innovations. *Proceedings of CSCL 2017*. *(Acceptance Rate: 35%)*

[P78] Almatrafi, O. & **Johri**, A. (2017). Showing and Telling: Response Dynamics in an Online Community of Makers. *Proceedings of CSCL 2017 (Acceptance Rate: 31%)*.

[P77] Pal, J., Viswanathan, A., Chandra, P., Nazareth, A., Kameshwaran, V., Subramonyam, H., **Johri**, A., Ackerman, M. & O'Modhrain, S. (2017) Agency in assistive technology adoption: Visual impairment and smartphone use in Bangalore. *Proceedings of the CHI 2017*. *(Acceptance Rate: 25%)*

2016

[P76] Bairaktarova, D. & **Johri**, A. (2016). The Role of Virtual Objects in Performing Engineering Related Task. Work in Progress Paper, *Proceedings of Frontiers in Education Conference*. *(Poster)*

[P75] Revelle, M., Domeniconi, C. & **Johri**, A. (2016). Persistent Roles in Online Social Networks. *Proceedings of ECML PKDD 2016*. *(Acceptance Rate: 28%)*

[P74] **Johri**, A. (2016). Demo or Die: Narrative Construction as Articulation Work for Promoting Early Stage Digital Innovations. *Proceedings of ACM Group 2016*. *(Acceptance Rate: 30%)*

[P73] Ren, Z., Rangwala, H. & **Johri**, A. (2016). Predicting Performance on MOOC Assessments using Multi-Regression Models. *Proceedings of Educational Data Mining 2016*. *(Acceptance Rate: 50%)*

[P72] *Gelman, B., Revelle, M., Domeniconi, C., **Johri**, A & Veeramachaneni, K. (2016). Acting the Same Differently: A Cross-Course Comparison of User Behavior in MOOCs. *Proceedings of Educational Data Mining 2016*. *(Acceptance Rate: 50%)*

[P71] Bland, L., *Kusano, S. & **Johri**, A. (2016). Engineering Competitions as Pathways to Development of Professional Engineering Skills. *Proceedings of ASEE 2016.*

[P70] **Johri**, A., Bland, L. & *Kusano, S. (2016). Informal Learning in Engineering. *Proceedings of ASEE 2016.*

[P69] *Almatrafi, O., **Johri**, A., Rangwala, H. & Lester, J. (2016). Identifying Course Trajectories of High Achieving Engineering Students through Data Analytics. *Proceedings of ASEE 2016*.

[P68] Gelman, B., Beckley, C. **Johri**, A., *Yang, S. & Domeniconi, C. (2016). Online Urbanism: Interest-based Subcultures as Drivers of Informal Learning in an Online Community. *Proceedings of ACM Learning at Scale Conference 2016*. *(Acceptance Rate: 22%)*

2015

[P67] Revelle, M., Domeniconi, C., Sweeney, M. & **Johri**, A. (2015). Finding Community Topics and Membership in Graphs. *Proceedings of ECML PKDD 2015*. *(Acceptance Rate: 23%)*

[P66] Revelle, M., Domeniconi C. & **Johri**, A. (2015). Evidence of Temporal Artifacts in Social Networks. Proceedings of *MUSE Workshop, ECML PKDD, 2015*, Porto, Portugal.

[P65] Rouly, M., Rangwala, H. & **Johri**, A. (2015). What Are We Teaching? Automated Evaluation of CS Curricula Content Using Topic Modeling. *Proceedings of ICER 2015*. *(Acceptance Rate: 26%)*

[P64] Molla Alameh, E., Vorvoreanu, M., *Yang, S., **Johri**, A. & Madhavan, K. (2015). A Comparative Analysis of Information Sharing and Access to Engineering Education Research Data. *Proceedings of ASEE 2015*.

[P63] London, J., McKenna, A., Vorvoreanu, M., **Johri**, A. & Madhavan, K. (2015). Developing and Advancing a Cyberinfrastructure to Gain Insights into Research Investments: An Organizing Research Framework. *Proceedings of ASEE 2015*.

[P62] *Almatrafi, O., Islam, K., **Johri**, A, Mondalu, A. & Nagappan, K. (2015). An Empirical Study of Face-to-Face and Distance Learning Sections of a Core Telecommunication Course. *Proceedings of ASEE 2015.*

[P61] *Kusano, S. & **Johri**, A. (2015). Developing Global Engineering Competency through Participation in "Engineers Without Borders". *Proceedings of ASEE 2015.*

[P60] *Chowdhury, B., Cameron, K., Blanchard, S. & **Johri**, A. (2015). SeeMore: An Interactive Kinetic Sculpture Designed to Teach Parallel Computational Thinking. *Proceedings of ASEE 2015.*

[P59] **Johri**, A. (2015). Sociomaterial Bricolage: Engineering Learning as the Practice of Making Sense by Making Do. *Proceedings of CSCL 2015. (pp. 691-692) (Poster)* *(Acceptance Rate: 45%)*

[P58] **Johri**, A. (2015). Digital Materiality as the Fabric for Socio-Temporal Organizing of Learning: A Case Study of Open Source Software Development. *Proceedings of CSCL 2015. (pp. 761-762) (Poster)* *(Acceptance Rate: 45%)*

[P57] *Ahmed, S., *Yang, S. & **Johri**, A. (2015). Does Online Q&A Activity Vary Based on Topic: A Comparison of Technical and Non-technical Stack Exchange Forums. *Proceedings of ACM Learning at Scale 2015* (Work-in-Progress Poster). *(Acceptance Rate: 80%)*

[P56] *Yang, S., Domeniconi, C., Revelle, M., Sweeney, M., Gelman, B., Beckley, C., & **Johri**, A. (2015). Uncovering Trajectories of Informal Learning in Large Online Communities of Creators. *Proceedings of ACM Learning at Scale, 2015. (Acceptance Rate: 25%)*

[P55] **Johri**, A. (2015). Supporting Global Virtual Work through Blogs and Micro-Blogging. *Proceedings of HICSS 2015*. ***(Acceptance Rate: 56%)***

[P54] Vorvoreanu, M., Sears, D. & **Johri**, A. (2015). Teaching and Learning in a Social Media Ecosystem: A Case Study. *Proceedings of HICSS 2015*. ***(Acceptance Rate: 41%)***

2014

[P53] * <u>Kusano</u>, S. & **Johri**, A. (2014). A Sense of Autonomy: Students' Self-Assessment of Design-Based Informal Learning Experiences in Engineering. *Proceedings of ASEE Annual Conference 2014.*

[P52] *<u>Chowdhury</u>, B., *<u>Kusano</u>, S., **Johri**, A. & Sharma, A. (2014). Peer Scaffolding in an Interdisciplinary Studio-based Design Course. *Proceedings of ASEE Annual Conference 2014.*

[P51] <u>Qiao</u>, Z., Wang, G. A. & **Johri**, A. (2014). Users' Behavior Comparison between Active and Inactive Newcomers in Online Knowledge Communities. *Proceedings for South East Decision Sciences Institute* (SE DSI) Conference'14, Wilmington, North Carolina, Feb. 19-21, 2014.

[P50] **Johri**, A. & *<u>Srinivasan</u>, J. (2014). The role of data in aligning the 'unique identity' infrastructure in India. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing (CSCW '14)*. ACM, New York, NY, USA, 697-709. ***(Acceptance Rate: 27%)***

[P49] *<u>Teo</u>, H. J. & **Johri**, A. (2014). Fast, functional, and fitting: expert response dynamics and response quality in an online newcomer help forum. In *Proceedings of Computer supported cooperative work & social computing (CSCW '14)*. ACM, New York, NY, USA, 332-341. ***(Acceptance Rate: 27%)***

2013

[P48] <u>Goncher</u>, A., **Johri**, A. & Boles, W. (2013) Student focus and prioritization of design parameters in first-year engineering design projects. *Proceedings of 24th Annual Conference of the Australasian Association for Engineering Education.*

[P47] *<u>Srinivasan</u>, J. & **Johri**, A. (2013). Creating machine readable men: legitimizing the 'Aadhaar' mega e-infrastructure project in India. In *Proceedings of Information and Communication Technologies and Development*. ACM, New York, NY, USA, 101-112. ***(Acceptance Rate: 19%)***

[P46] *<u>Teo</u>, H. J., **Johri,** A. & <u>Brogan</u>, D. S. (2013). Towards an Understanding of ECE Students' Use of Online Homework Help Forums. *Proceedings for FIE 2013.*

[P45] *<u>Teo</u>, H. J., **Johri**, A. & Lohani, V. (2013). Assessment of Online Participation through Social Network Measures: A HLM Approach. *Proceedings of FIE 2013. (Poster)*

[P44] <u>Moore</u>, J. P., Williams, C. B., North, C. & **Johri**, A. (2013). Promoting Conceptual Understanding in Engineering Statics Through the Use of Adaptive Concept Maps. *2013 ASEE Annual Conference*, Atlanta, GA.

[P43] *<u>Teo</u>, H. J., **Johri**, A. & *<u>Mitra</u>, R. (2013). Experts Learn More (than Newcomers): An Exploratory Study of Argumentation in an Online Help Forum. *Proceedings of Computer Supported Cooperative Learning 2013, Wisconsin, MI, USA. (Full paper)*. ***(Acceptance Rate: 36%)***

[P42] *Teo, H. J., **Johri**, A. & *Mitra, R. (2013). Visualizing and Analyzing Productive Structures and Patterns in Online Communities Using Multilevel Social Network Analysis. *Proceedings of Computer Supported Cooperative Learning 2013, Wisconsin, MI, USA. (Short paper).* **(Acceptance Rate: 39%)**

[P41] Madhavan, K. P. C., **Johri**, A. & Xian, H., Vorvoreanu, M., Wang, G. A. & *Khandeparker, A. (2013). iKNEER: Interactive System to Assess and Visualize Relational and Epistemic Networks. *Learning and Knowledge Analytics 2013, Leuven, Belgium. (Poster).*

[P40] *Teo, H. J., **Johri**, A. & *Mitra, R. (2013). Productive Structures and Patterns - Multilevel Social Network Analysis of a Java Programming Help Forum. *Learning and Knowledge Analytics 2013, Leuven, Belgium. (Poster).*

2012

[P39] **Johri**, A. & Sharma, A. (2012). Learning From Working on Others' Problems: Engaging Students in Long-term Global Projects for Reciprocal Learning. *Proceedings of ASEE Annual Conference 2012.*

[P38] **Johri**, A., *Teo, H. J., Lo, J., Dufour, M. & Schram, A. (2012). Digital Engineers: Results of a Survey Study Documenting Digital Media and Device Use Among Freshmen Engineering Students. *Proceedings of ASEE Annual Conference 2012.* **(Best Paper Nominee, Computers in Education Division, Top 5 out of 68 papers submitted to the division)**

[P37] Williams, C.W, Moore, J. P., **Johri**, A., Peirce, R. S., and North, C. (2012). Advancing Personalized Engineering Learning via an Adaptive Concept Map. *Proceedings of ASEE Annual Conference 2012.*

[P36] Singh, V., Kathuria, S. & **Johri**, A. (2012). Newcomer integration and learning in technical support communities for Open Source Software. *Proceedings of ACM Conference on Computer Supported Collaborative Work*, Feb. 11-15, 2012, Seattle, WA. *(Interactive Paper)*

2011

[P35] **Johri**, A., Wang, A., Liu, X. & Madhavan, K. (2011). Utilizing Topic Modeling Techniques to Identify Emergence and Growth of Research Topics in Engineering Education, *Proceedings of IEEE FIE 2011.*

[P34] *Goncher, A. & **Johri**, A. (2011). Do Authentic Constraints Inspire Innovative Solutions? Findings from a Case Study of a Freshmen Engineering Design Project. *Electronic Proceedings of MUDD VIII Design Workshop*, Harvey Mudd College, Claremont, CA, May 28-29.

[P33] **Johri**, A. & *Teo, H. (2011). Leveraging Advances in Open Innovation to Re-design Design Learning. *Electronic Proceedings of MUDD VIII Design Workshop*, Harvey Mudd College, Claremont, CA, May 28-29.

[P32] *Goncher, A. & **Johri**, A. (2011). The Identification and Emergence of Constraints in Engineering Design Projects. *Proceedings of 2011 Annual Conference and Exposition of the American Society of Engineering Education.*

[P31] Madhavan, K., Xian, H., **Johri**, A., Vorvoreanu, M., Jesiek, B.K., & Wankat, P.C. (2011). Understanding the Engineering Education Research Problem Space Using Interactive Knowledge Networks. *Proceedings of the American Society of Engineering Education Annual Conference and Exposition.*

[P30] Singh, V., **Johri**, A. & *Mitra, R. (2011). Types of Newcomers in an Online Developer Community.

Proceedings of the ACM Conference on Computer Supported Cooperative Work, March 2011, pp. 717-720. *(Interactive Paper)*

[P29] **Johri**, A., Nov, O. & *Mitra, R. (2011). Environmental Jolts: Impact of Exogenous Factors on Online Community Participation. *Proceedings of the ACM Conference on Computer Supported Cooperative Work*, March 2011, pp.649-652. *(Interactive Paper)*

[P28] **Johri**, A. (2011). Look Ma, No Email! Blogs and IRC as Primary and Preferred Communication Tools in a Distributed Firm. *Proceedings of the ACM Conference on Computer Supported Cooperative Work*, March 2011, pp. 305-308. **(Best Note Award, Top 1% of submissions, 3 out of 268)**

[P27] *Mitra, R., Singh, V. & **Johri**, A. (2011). Cyberlearning Ecosystem - Users, Technology and Tools. *Proceedings of iConference 2011*, Feb. 8-11, Seattle, USA, pp. 719-721.

[P26] **Johri**, A., Nov, O. & *Mitra, R. (2011). "Cool" or "Monster"? Company Takeovers and Their Effect on Open Source Community Participation. *Proceedings of iConference 2011*, Feb. 8-11, Seattle, USA, pp. 327-331. *(Acceptance Rate: 63%)*

2010

[P25] *Goncher A., Kothaneth S. & **Johri** A. (2010). Team Communication and Innovative Design Practices: The Effect of Team Adoption and Implementation of the Tablet PC. *Proceedings of the 54th Human Factors and Ergonomics Conference.* Sept 27th to Oct.1, 2010, San Francisco, pp.1971-1975.

[P24] **Johri**, A. & Olds, B. (2010). Engineering Learning. *Proceedings of International Conference of the Learning Sciences*, Chicago, IL, June 2010, pp.503-504. *(Workshop)*

[P23] *Goncher, A., **Johri**, A. & Sharma, A. (2010). Use-Value and Functionality versus Aesthetics and Experience: Inculcation of Design Ideologies in Engineering and Industrial Design Students. *Proceedings of the Frontiers in Education Conference*, Arlington, VA, 2010.

[P22] **Johri**, A., Lo, J. Dufour, M. & Shanahan, D. (2010). AdWiki: Designing and Implementing a Socio-Technical Infrastructure for Engineering Student Advising. *Proceedings of the Frontiers in Education Conference*, Arlington, VA, 2010.

2009

[P21] **Johri**, A., Chen, H. & Lande, M. (2009). Creativity and Cognition in Engineering Design: Theoretical and Pedagogical Perspectives. *Proceedings of Creativity and Cognition 2009*, ACM Press, Berkeley, CA.

[P20] *Goncher, A., **Johri**, A., Kothaneth, S. & Lohani, V. (2009). Exploration and Exploitation in Engineering Design: Examining the Effects of Prior Knowledge on Creativity and Technology Use. In *Proceedings of 39th ASEE/IEEE Frontiers in Education Conference, October 18 - 21, 2009, San Antonio, TX.* p.M1J-1-M1J-7.

[P19] Pembridge, J., **Johri**, A. & Williams, C. (2009). Transformative Design Practices: Comparing Face-to-Face and Technology-Mediated Design Experiences among Engineering Students. *Proceedings of 39th ASEE/IEEE Frontiers in Education Conference, October 18 - 21, 2009, San Antonio, TX.* pp. W2H-1-W2H-7.

[P18] **Johri**, A. (2009). Preparing Engineers for a Global World: Identifying and Teaching Sensemaking and Practice Forming Strategies. *Proceedings of 39th ASEE/IEEE Frontiers in Education Conference, October 18*

- 21, 2009, San Antonio, TX. pp. M2D-1-M2D-6.

[P17] Pierrakos, O., <u>Beam</u>, TK., <u>Constantz</u>, J., **Johri**, A., & Anderson, R. (2009). On the Development of a Professional Identity: Engineering Persisters Vs Engineering Switchers. *Proceedings of 39th ASEE/IEEE Frontiers in Education Conference, October 18 - 21, 2009, San Antonio, TX.* pp. M4F-1-M4F-6

[P16] **Johri**, A. (2009). Work in Progress – Reorganizing Engineering Pedagogy: Preventing Student Disengagement by Increasing Dialogic Learning. *Proceedings of 39th ASEE/IEEE Frontiers in Education Conference, October 18 - 21, 2009, San Antonio, TX.* pp. M3J-1-M3J-2.

[P15] <u>Beam</u>, TK., Pierrakos, O., <u>Constantz</u>,J., **Johri**, A., & Anderson, R. (2009).Preliminary Findings on Freshmen Engineering Students' Professional Identity: Implications for Recruitment and Retention. *Proceedings of 2009 ASEE Annual Conference and Exposition, Austin, Texas, June 14-17.* AC 2009-993.

[P14] **Johri**, A. (2009). Open Organizing: Designing Sustainable Work Practices for the Engineering Workforce. *Electronic Proceedings of MUDD Design Workshop*, Harvey Mudd College, May 2009.

2008

[P13] Lohani, V. K., <u>Castles</u>, R., **Johri**, A., Spangler, D. & Kibler, D. (2008). Analysis of Tablet PC Based Learning Experiences in Freshman to Junior Level Engineering Courses, *Proc. 2008 ASEE Annual Conference*, June 22-25, 2008, Pittsburgh. AC 2008-1763.

[P12] **Johri**, A. & Lohani, V. (2008). Representational Literacy and Participatory Learning: Analyzing Tablet Experiences in Large Classes. *In Proceedings of 38th ASEE/IEEE Frontiers in Education Conference Saratoga Springs, NY.* pp. S3J-1-S3J-6.

[P11] **Johri**, A. (2008). Boundary Spanning Knowledge Broker: An Emerging Role in Global Engineering Firms. *In Proceedings of 38th ASEE/IEEE Frontiers in Education Conference Saratoga Springs, NY.* pp. S2E-7-S2E-12.

[P10] Evans, M., **Johri**,A., Glasson, G., Cagiltay, K, Pal, J., & Sarkar, P. (2008). ICT4D and the Learning Sciences. *In the proceedings of International Conference of Learning Sciences 2008.* Vol. 3, pp.229-236. *(Acceptance Rate: 50%)*

[P9] Newstetter, W., **Johri, A.**, & Wulf, V. (2008). Laboratory Learning: Industry and University Research as Sites for Situated and Distributed Cognition. *In the Proceedings of International Conference of Learning Sciences 2008.* Vol. 3, pp.290-297. *(Acceptance Rate: 50%)*

[P8] **Johri, A.** & Lohani, V. (2008). Creating a Participatory Learning Environment in Large Classes Using Pen-Based Computing. *Proceedings of International Conference of Learning Sciences 2008.* Vol. 1, pp.398- 405. *(Acceptance Rate: 32%)*

[P7] **Johri, A. &** Lohani, V. (2008). Analysis of Tablet PC Based Learning Experiences in Engineering Classes. *In the proceedings of International Conference of Learning Sciences 2008.* Vol. 3, pp.51-52. *(Acceptance Rate: 50%)*

2007- Prior

[P6] **Johri**, A. (2007). The Socio-Technical Process of Newcomer Participation: Findings from a Field Study.

International Conference of Computer Supported Collaborative Learning, Rutgers, NJ, July 16 –21, 2007. pp. 438-439. *(Poster)* **(Acceptance Rate: 50%)**

[P5] **Johri**, A., Pipek, V., & Wulf, V. (2007). Bridging Artifacts and Actors: Supporting Knowledge and Expertise Sharing Work Practices through Technology. *Computer-Human Interaction and Management of Information Technology*, Boston, MA, March 30-31, 2007. pp. 1-2. *(Poster)* **(Acceptance Rate: 32%)**

[P4] Barron, B., Tackman, J., Martin, C. Mercier, E., **Johri**, A., Johnson et al. (2004) Equity and the Development of Technological Fluency. *The Proceedings of the Sixth International Conference of the Learning Sciences (ICLS)*. Mahwah, NJ: Erlbaum.

[P3] Broglio, R. & **Johri**, A. (2002). Living Inside the Poem: Enhancing English Literature Classes with MOOs. In P. Bell, R. Stevens, & T. Satwicz (Eds.), *Proceedings of the Fifth International Conference of the Learning Sciences (ICLS)* (pp. 512-513). Mahwah, NJ: Erlbaum. *(Poster)* **(Acceptance Rate: 50%)**

[P2] **Johri**, A. (2002). Designing for Change: Findings from an Ethnographic Study of a Complex Learning Environment. In P. Bell, R. Stevens, & T. Satwicz (Eds.), *Proceedings of the Fifth International Conference of the Learning Sciences (ICLS)*. Mahwah, NJ: Erlbaum. *(Poster)* **(Acceptance Rate: 50%)**

[P1] Civjan, J., **Johri**, A., Avery, C. & Herrington, T. (2002). VisOC: A Tool for Visualizing Online Communication in Educational Settings. In P. Bell, R. Stevens, & T. Satwicz (Eds.), *Proceedings of the Fifth International Conference of the Learning Sciences (ICLS)*. Mahwah, NJ: Erlbaum. *(Poster)* **(Acceptance Rate: 50%)**

Book Chapters (Peer reviewed (PR)/Editorially Reviewed (ER))

[B17] **Johri**, A. & Hingle, A. (2025). Ethical Concerns with Platform Technologies and Video-Based Monitoring of Exams. In Thomas, D. & Laterza, V. (Eds.) *Critical EdTech Studies and Digital Platforms in Higher Education: Varieties of Platformisation*. Springer. **(PR)**

[B16] Herzog, C., **Johri**, A. & Tormey, R. (2025). Teaching ethics using case studies. In Chance, S., Børsen, T., Martin, D., Tormey, R., Lennerfors, T. T., & Bombaerts, G., (Eds.). *International Handbook of Engineering Ethics Education*. Routledge. https://doi.org/10.4324/9781003464259

[B15] **Johri**, A. (2023). Introduction to the International Handbook of Engineering Education Research (IHEER). Johri, A. (Ed.). *International Handbook of Engineering Education Research*. Routledge, T&F.

[B14] Goncher, A., Hingle, A., **Johri**, A. & Case, J. (2023). The Role and Use of Theory in Engineering Education Research. Johri, A. (Ed.). *International Handbook of Engineering Education Research*. Routledge, T&F. **(PR)**

[B13] Secules, S., Perez, G., Pea, R. & **Johri**, A. (2023). Critical and Cultural Analysis of Engineering Learning. Johri, A. (Ed.). *International Handbook of Engineering Education Research. Routledge*, T&F. **(PR)**

[B12] Malmi, L. & **Johri**, A. (2023). A Selective Review of Computing Education Research. Johri, A. (Ed.). *International Handbook of Engineering Education Research*. Routledge, T&F. **(PR)**

[B11] Klein, C., Lester, J., Rangwala, H. & **Johri**, A. (2020). Learning Analytics for Learning Assessment: Complexities in Efficacy, Implementation, and Broad Use. In Webber, K. & Zheng, H. (Eds.) *Big Data on Campus: Data Analytics and Decision Making in Higher Education*, John Hopkins University Press. (**ER**)

[B10] Revelle, M., Domeniconi, C. & **Johri**, A. (2019). Temporal Artifacts from Edge Accumulation in Social Interaction Networks. In A. Esposito et al. (eds.) *Neural Advances in Processing Nonlinear Dynamic Signals*, 102, Springer. (**ER**)

[B9] **Johri**, A. (2018). Absorptive Capacity and Routines: Understanding Barriers to Learning Analytics Adoption in Higher Education. Lester, J., Klein, C., Rangwala, H. & Johri, A. (Eds.). *Learning Analytics in Higher Education: Current Innovations, Future Potential, and Practical Applications*. Routledge, NY. (**ER**)

[B8] **Johri**, A. (2014). Engineers' Knowing in Practice: Aligning Materiality and Sociality through Action. Fenwick, T. & Nerland, M (Eds.). *Reconceptualising Professional Learning in Turbulent Times: changing knowledges, practices, and responsibilities.* Routledge. *(ER)*

[B7] **Johri**, A. (2014). Using Qualitative and Ethnographic Research Methods to Conduct Interpretive Research in Engineering Education. Johri, A. & Olds, B. (Eds). The *Cambridge Handbook of Engineering Education Research*, Cambridge University Press, New York, NY, pp.571-570. *(PR)*

[B6] **Johri**, A., Bolds, B. M. & O'Connor, K. (2014). Situative Frameworks for Engineering Learning Research. Johri, A. & Olds, B (Eds). The *Cambridge Handbook of Engineering Education Research*, Cambridge University Press, New York, NY. (Revised from Johri & Olds (2011) article in *JEE*) *(PR)*

[B5] **Johri**, A. & Jesiek, B. (2014). Global and International Issues in Engineering Education. Johri, A. & Olds, B. (Eds). *Cambridge Handbook of Engineering Education Research*, Cambridge University Press, New York, NY. *(PR)*

[B4] Stevens, R., **Johri**, A. & O'Connor, K. (2014). Professional Engineering Work. Johri, A. & Olds, B. (Eds). The *Cambridge Handbook of Engineering Education Research*, Cambridge University Press, New York, NY. *(PR)*

[B3] **Johri**, A. (2006). Interpersonal Assessment: Assessing Peer Knowledge and Behavior in Online Learning Environments. In Roberts, T. (Ed). *Self, Peer, And Group Assessment in E-Learning*. Idea Group Publishing. pp. 283-312. *(PR; Competitive; 30% Acceptance Rate)*

[B2] **Johri**, A. (2005). Online, Offline, and In-Between: Analyzing Mediated-Action among American and Russian Students in an Online Class. In Roberts, T. (Ed). *Computer-Supported Collaborative Learning in Higher Education*. Idea Group Publishing. pp. 259-280. *(PR; Competitive; 30% Acceptance Rate)*

[B1] Avery, C., Civjan, J., & **Johri**, A. (2005). Assessing Student Interaction in the Global Classroom Project: Visualizing Communication and Collaboration Patterns Using Online Transcripts. In Cook, K. C., & Grant-Davie, K. (Eds). *Online Education: Global Questions, Local Answers*. pp. 245-266. Baywood Pub. *(ER)*

Column in ASEE Prism – *Digital Lens*

[DL12] **Johri**, A. (2022). "Out of Control: Institutions must carefully consider decisions to give up data and flexibility to digital platforms." Summer 2022 Issue

[DL11] **Johri**, A. (2021). "Confronting Hate is Just the Start: To address anti-Asian bias, academia must move from tolerance toward true inclusion." Winter 2021 Issue.

[DL10] **Johri**, A. (2021). "Every Exam They Take, We'll Be Watching Them: Software tools can help reduce cheating in online learning—but at what cost to student privacy and equity?" Summer 2021 Issue.

[DL9] **Johri**, A. (2020). "How to Make the Most of AI: The advancing field offers valuable tools for educators and growing opportunities for research." October 2020.

[DL8] **Johri**, A. (2020). "Little Woes, One Great Problem: Gaps in coordination, execution, and expectation plague online teaching. They can't be filled with mere tweaks." January 2020.

[DL7] **Johri**, A. (2019). "Sisyphus in the Digital Workplace: Today's IT professionals must keep up with both continuous demands for new skills and new ways of learning.," October 2019.

[DL6] **Johri**, A. (2019). "The Age of Analytics: How to Design Better Data-Driven Tools," February 2019.

[DL5] **Johri**, A. (2018). "Hashtag Inclusion: Digital activism tools highlight the progress – or lack thereof – in engineering workplace diversity," October 2018.

[DL4] **Johri**, A. (2018). "An Engineering Conundrum: What will we do when machines do everything," January 2018.

[DL3] **Johri**, A. (2017). "A Go-to Resource for Engineers: Participants in online forums not only share what they know but also generate new knowledge," October 2017.

[DL2] **Johri**, A. (2017). "Am I My Machine's Keeper? Devices that learn from and influence users pose new ethical dilemmas," January 2017.

[DL1] **Johri**, A. (2016). "Gotta Catch Them All? A global gaming sensation holds lessons for engineering educators that go well beyond technology fads." September 2016.

Articles, Guest Editorials, and Book Reviews *(Editorially Reviewed)*

[E10] **Johri**, A., Katz, A., Qadir, J. & *Hingle, A. (2023). Generative AI and Engineering Education. *Journal of Engineering Education*, July 2023.

[E9] **Johri**, A. (2020). Guest Editorial: Artificial Intelligence (AI) and Engineering Education. *Journal of Engineering Education*, June 2020.

[E8] **Johri**, A. (2017). Book Review: Designing and Using Effective Learning Environments for STEM Education (Authors: R. Felder & R. Brent). *Advances in Engineering Education*, April 2017.

[E7] *Goncher, A. & **Johri**, A. (2015). JEE Selects: How Context Shapes Learning. *ASEE Prism*, November.

[E6] **Johri**, A. (2015). Opening Up Engineering Education Research: It's Time for a Dialogue on Data Sharing. *ASEE Prism*.

[E5] Madhavan, K., **Johri**, A., Xian, H. Wang, G. A. & <u>Liu</u>, X. (2014). Knowing What We Know, and Who Knows What: An Online Portal to Allow Engineering Educators to Learn About Their Field. *AEE Selects, ASEE Prism*.

[E4] **Johri**, A. & Olds, B. (2014). Cambridge Handbook of Engineering Education Research and Reflections on the Field. Guest Editorial, *Journal of Engineering Education*, July 2014.

[E3] **Johri**, A. & *<u>Teo</u>, H. J. (2013). Using Data Analytics to Examine Expert/ Novice Behavior in Informal Online Communities. *Bulletin of the IEEE Technical Committee on Learning Technology*, 15(2):2-5.

[E2] **Johri**, A. (2010). Creating Theoretical Insights in Engineering Education. Guest Editorial, *Journal of Engineering Education*, July 2010.

[E1]   **Johri**, A. (2010). Global and Virtual Teamwork: Review Essay. Book Review, *Journal of Engineering Education*, January 2010. *(Editorially Reviewed)*

Refereed Workshops, Tutorials, Panels, & Symposia Organized

[W23] **Johri**, A., (2024). Introduction to Engineering Education Research. Invited Workshop at T4E/COMPUTE 2024 Conference, IIT Gandhinagar, Dec. 6, 2024.

[W22] Chance, S., **Johri**, A., et al. (2024). Securing Fellowships for Engineering Education Research. SEFI 2024 Workshop.

[W21] Chance, S., **Johri**, A., et al. (2024). Leading the Development of EER Books and Special Issues. SEFI 2024 Workshop.

[W20] **Johri**, A., (2024). Role-Play Case Studies. In Hladik, S. & Zacharias, K. (Ed). Teaching Sociotechnical Case Studies: Exhibition and Discussion, Special Session LEES Division, June 25, 2024.

[W19] Mohammadi-Aragh, M., Hooper, K., McCahan, S., **Johri**, A., Beck, P. & Katz, A. (2024). Generative AI and Engineering Education Classrooms. *ASEE 2024 Panel* sponsored by Computers & Education Division, June 25, 2024.

[W18] **Johri**, A., Katz, A. & McCahan, S. (2024). User of Generative Artificial Intelligence (AI) Tools for Engineering Education Research, Teaching & Learning. *ASEE 2024 Workshop* sponsored by Computers & Education Division, June 23, 2024.

[W17] **Johri**, A., (2024). Introduction to Engineering Education Research. Organized by IUCEE, hosted by Anurag University, Telangana, India, March 16, 2024. Host: Dr. Krishna Vedula.

[W16] Dansu, V., Katz, A., **Johri**, A., Wang, L., Hooper, K. & Brijmohan, Y. (2023) Use of Generative AI in Engineering Education: Opportunities and Challenges. Invited Panel, *ASEE 2023* (organized by Student Division and Computers & Education Division).

[W15] **Johri**, A., Huff, J., Tang, X., Chance, S. & Main, J. (2023). Panel on International Handbook of Engineering Education Research and Future of EER. ERM panel at *ASEE 2023*, June 26, 2023.

[W14] **Johri**, A. & Katz, A. (2023). Generative Artificial Intelligence (AI) and Engineering Education. *ASEE 2023 Workshop* sponsored by Computers & Education Division, June 25, 2023.

[W13] **Johri**, A., Edstrom, K., Du, X., Mitchell, J. & May, D. (2022). Knowledge Construction in Engineering Education Research – Assessing the Role of Journals, Books, Conferences, and Other Products of Research. *Panel at FIE 2022*.

[W12] **Johri**, A. (2022). AI in Agriculture: Ethical Concerns and Responsible Solutions. Online workshop, June 22, 2022 (15 expert panelists).

[W11] Martin, D., **Johri**, A., Hingle, A. & Lennerfors, T. (2021). Role-playing Hypothetical Stakeholder Scenarios. *Workshop at SEFI 2021*.

[W10] **Johri**, A. (2020). CHEER UP: Cambridge Handbook of Engineering Education Research – Updated Perspectives, A Series of Conversation with Chapter Authors, July 2 - August 2020, 2020, 15 Online Panels Offered Using Zoom, 400 registrants (70-150 participants in each session)

[W09] Elbadrawy, A., Rangwala, H., **Johri**, A. & Karypis, G. (2017). Tutorial: Opportunities, Challenges and Methods for Higher Education Data Mining. *SIAM International Conference on Data Mining*.

[W08] **Johri**, A., Rangwala, H., Agarwal, V. & Srikanth, S. (2015). Assessment and Big Data. ICDM 2015.

[W07] Wyche, S. P., Oreglia, E., Sengers, P., Ames, M. G., **Johri**, A., Steinfeld, C. & Hoadley, C. (2012). Learning from Marginalized Users: Reciprocity in HCI4D. Workshop at CSCW 2012, February 12.

[W06] **Johri**, A. & Olds, B. (2010). Engineering Learning. Pre-conference Workshop at ICLS 2010, Chicago, IL, June 2010.

[W05] **Johri**, A. & Madhavan, K. (2010). Introduction to Cyberinfrastructure for Engineering Education Research, Learning and Outreach. Invited Workshop at NSF EEC Awardees Conference, Reston, VA, Feb. 1-2, 2010.

[W04] **Johri**, A., Chen, H. & Lande, M. (2009). Creativity and Cognition in Engineering Design: Theoretical and Pedagogical Perspectives. *Workshop at Creativity and Cognition 2009*, Berkeley, CA.

[W03] Evans, M., **Johri**,A., Glasson, G., Cagiltay, K, Pal, J., & Sarkar, P. (2008). ICT4D and the Learning Sciences. Symposium organized at the *International Conference of Learning Sciences 2008.*

[W02] Newstetter, W., **Johri, A.**, & Wulf, V. (2008)**.** Laboratory Learning: Industry and University Research as   Sites for Situated and Distributed Cognition**.** Symposium organized at the *International Conference of Learning Sciences 2008.*

[W01] **Johri**, A. & Wulf, V. (2007). Communities of Practice in Highly Computerized Work Settings. Workshop organized at *Communities and Technologies Conference (C&T 2007)*, East Lansing, Michigan.

Invited Contribution to National-level Policy Reports/Initiatives

[NP5] "Discovery in a Research Portfolio: Tools for Structuring, Analyzing, Visualizing and Interacting with Proposal and Award Portfolios," Final Report, NSF CISE and SBE AC Subcommittee, November 2010.

[NP4]   American Society for Engineering Education (ASEE) report on "Innovations in Engineering Education," November 2008, Atlanta, GA.

[NP3]   NSF Report "Thought Leaders Workshop on the Future of Engineering Education," June 2008

[NP2]   NSF Workshop Report on "Cyberinfrastructure and Engineering Education," September 4-5, 2008, Arlington VA.

[NP1]   NSF Workshop Report on "Digital Video Inquiry in Learning and Education," November 25-26, 2002, Palo Alto, CA.

Presentations

Refereed Conference/Workshop Presentations

[C33] Hingle, A. & **Johri**, A. (2024) Technology Students' Recognition of Algorithmic Data Bias through Role-Play Case Studies. ASEE Collaborative Network for Engineering & Computing Diversity (CoNECD) Conference.

[C32] Lahiri, A., Krishnan, N., Kier, A., **Johri**, A. & Pal, J. (2023). Unpacking the Effect of Political Affiliation on Organizational Resilience Following a Policy Shock. Academy of Management Annual Meeting 2023.

[C31] **Johri**, A. (2022). Technological Paradox as Occasion for Restructuring Educational Practices and Igniting Moral Imagination. Workshop on Varieties of Platformisation: How EdTech Shaped Higher Education, May 25, 2022.

[C30] Hingle, A., **Johri**, A., Rangwala, A. & Monea, A. (2021). Using Role Play Scenarios to Teach Ethical Thinking. Innovations in Teaching & Learning Conference Proceedings, Vol.13.

[C29] Lahiri, A., Krishnan, N., Kier, A., Pal, J. & **Johri**, A. (2021). Building resilience following a policy shock: Evidence from India's demonetization. Academy of Management Annual Meeting 2021.

[C28] Lahiri, A., Krishnan, N., Kier, A., Pal, J. & **Johri**, A. (2021). Building Resilience Following A Policy Shock: Evidence From India's Demonetization. Babson College Entrepreneurship Research Conference 2021. (45% Acceptance Rate)

[C27] **Johri**, A. (2019). Searching as Purposeful Workplace Learning for Problem-Solving and Knowledge Construction. *I Search Therefore I Learn* (ISTIL) Workshop, September 2019, Magdeburg, Germany.

[C26] Almatrafi, O., Rangwala, H., **Johri**, A. & Lester, J. (2016). Using Learning Analytics to Trace Academic Trajectories of CS and IT Students to Better Understanding Successful Pathways to Graduation. *Proceeding SIGCSE '16 691-691*.

[C25] Lester, J., Klein, C., Rangwala, H. & **Johri**, A. (2017). Learning Dashboards: How Data Accuracy, Context, and Trust Impact Student Sensemaking and Learning Behaviors. *Presentation at AERA 2017.*

[C24] Chowdhury, B. & **Johri**, A. (2017). Collaborative Interdisciplinary Computational Thinking. *AERA Symposium on "Stories from the Field: Integrating Computational Thinking Across Curricular Domains".*

[C23] Klein, C., Lester, J., Rangwala, H. & **Johri**, A. (2016). Using predictive analytics in teaching and advising: Promising practices and practical considerations. Innovations in Teaching & Learning Conference Proceedings Vol. 8.

[C22] **Johri**, A., Vorvoreanu, M., Madhavan, K. (2016). Data Sharing in Engineering Education. Special Session *Presentation at ASEE 2016.*

[C21] Lester, J., Klein, C., Rangwala, H. & **Johri**, A. (2016). Educational Data Mining and Higher Education. *AERA Symposium.*

[C20] Lester, J., Klein, C., Rangwala, H. & **Johri**, A. (2015). Leveraging learning analytics for teaching and advising: Barriers and behaviors related to adoption by faculty and staff. *ASHE*, Denver, CO.

[C19] **Johri**, A., Madhavan, K., Vorvoreanu, M., Lichtenstein, G., Chen, H., Sheppard, S. & McKenna, A. (2014). Lessons from the DIA2 project for undertaking cyberinfrastructure-based team science. *Science of Team Science Conference*, Austin, TX, August 6-8, 2014.

[C18] **Johri**, A. (2014). Lessons for Large-scale Learning and Teaching for Higher Education Institutions from Online Forums. *ICA Preconference on Innovations in Higher Education*, Seattle, WA, May 22, 2014.

[C17] **Johri**, A. (2014). Data Sharing Frameworks for Education Research. Position paper for "Sharing, re-use and circulation of resources in cooperative scientific work," *Workshop at CSCW 2014*, February, Baltimore, U.S.

[C16] **Johri**, A. (2014). Technology as catalyst and context: Global software development through Postcolonial Third Spaces. Position paper for *Workshop on Global Software Development in a CSCW Perspective*, February, Baltimore, U.S.

[C15] **Johri**, A. & Sharma, A. (2011). Designing for Development: Three Preliminaries Studies from Field Research in India. Workshop on *Mobile Collaboration in the Developing World* at ACM CSCW 2011, March 20, 2011.

[C14] **Johri**, A. (2010). Leveraging the Digital Media Ecology in a Distributed Firm. Presented at the *International Symposium of Information Systems*, Hyderabad, India, Dec. 18, 2010.

[C13] **Johri**, A. (2009). Using Case Studies and Case Preparation Kits to Teach Global Team Competency. *12th Annual Colloquium on International Engineering Education*, Ames, Iowa October 22-25, 2009.

[C12] J**ohri**, A. (2009). Multiplicity and Personalization: How Global Engineers Develop Successful Technology-Mediated Work Practices, *12th Annual Colloquium on International Engineering Education*, Ames, Iowa October 22-25, 2009.

[C11] **Johri**, A. (2009). Demo or Die: The Collective Championing of Digital Innovations in an R&D Organization. *Academy of Management*, 2009, Chicago, IL.

[C10] **Johri**, A. (2008). Why We See Coworkers Differently: Situational and Institutional Shaping of Impressions. Presented at Organizational Communication and Information Systems Division Session on Individuals and Distributed Work, *Academy of Management*, 2008, Anaheim, CA.

[C9] **Johri**, A. (2006). Interpersonal Impression Formation in a Community of Practice. Presented at the Doctoral Consortium *International Conference of Learning Sciences*, June 2006, Bloomington, Indiana.

[C8] **Johri,** A. (2005). Working Across the Pacific: A Field Study of Impression Formation among Distributed Coworkers in an R&D Organization, Presented at the Doctoral Consortium Workshop, *European Computer Supported Cooperative Work,* September 2005, Paris, France.

[C7] **Johri**, A. (2005). Understanding Impression Formation and Impression Accuracy Among Distributed Coworkers. Presented at Organizational Communication and Information Systems Division, *Academy of Management,* 2005, Honolulu, HI.

[C6] **Johri,** A. (2005) Knowing Others: Understanding Interpersonal Impression Formation Among Learners in Technology Mediated Communities of Practice. Presented at the Student Community Workshop, *Computer Supported Cooperative Learning,* May 2005, Taipei, Taiwan.

[C5] **Johri,** A. (2005). Understanding and Developing a "Learning Relationship" in Computer Supported Learning Communities. Presented at the Fostering Learning Communities Workshop, *Computer Supported Cooperative Learning,* May 2005, Taipei, Taiwan.

[C4] **Johri**, A. (2005). Sharing Interpersonal and Contextual Knowledge: Developing a Community of Practice in Distributed Online Learning Environments. *Annual Conference of American Educational Research Association,* 2005, Montreal, Canada.

[C3] **Johri**, A. (2005). Using Structuration Theory to Analyze and Understand Technology Use in a Distributed Online Learning Environment. *Annual Conference of American Educational Research Association,* 2005, Montreal, Canada.

[C2] **Johri**, A. (2003). When the Technology that Facilitates is also the Technology that Inhibits: Results from the Case Study of a Cross-Cultural Online Learning Environment. *Annual Conference of American Educational Research Association,* 2003, Chicago, IL.

[C1] Barron, B., Martin, C., Mercier, E., Pilner, K., Mathias, A., **Johri**, A, & Walter, S. (2003). Patterns of Participation in Fluency-Building Experiences in a High-tech Community: Implications for Bridging Divides by Design. *Annual Conference of American Educational Research Association,* 2003, Chicago, IL.

Supervision of Post-Doctoral Associates & Graduate and Undergraduate Students

Postdoctoral Associate Supervised
1. Dr. Yinan Sun (September 2024 – Present) (Ph.D. University of Hawaii)
2. Dr. Aqdas Malik (December 2016 – October 2018) (Ph.D. Aalto University, Finland)
   Job after postdoc: Assistant Professor, Information Systems, Sultan Qaboos University, Muscat, Oman
3. Dr. Stephanie Kusano (January 2015-June 2015) (Ph.D. Virginia Tech)
   Job after postdoc: Evaluation and Assessment Postdoctoral Research Scholar, Provost's Office, University of Michigan
4. Dr. Seungwon Yang (January 2014 - July 2015) (Ph.D. Virginia Tech)
   Job after postdoc: Assistant Professor, School of Library and Information Science (SLIS), Louisiana State University, Baton Rouge, LA
5. Dr. Janaki Srinivasan (Jan. 2013-March 2014) (Ph.D. University of California, Berkeley)
   Job after postdoc: Assistant Professor, IIIT, Bangalore, India

Ph.D. and M.S. Advisee

Graduated‡

PhD
1. Andrea Goncher (Ph.D., Engineering Education; Graduated: December 2012)
   Thesis: Contextual Shaping of Student Design Practices: The Role of Constraint in First-Year Engineering Design
   Job after graduation: Postdoctoral Associate, Queensland University of Technology, Brisbane, Australia
   Current Position: Lecturer (Assistant Professor), Charles Sturt University, Bathurst, NSW, Australia
   - *Accepted for competitive doctoral consortium at Creativity and Cognition, Oct. 2009*
   - *Fully funded to present dissertation research at Mudd Design Workshop, May 2011*
2. Hon Jie Teo (Ph.D., Engineering Education; Graduated: August 2014; co-advised with Vinod Lohani)
   Thesis: Knowledge Creation Analytics for Online Engineering Learning
   Job after graduation: Assistant Professor, CUNY, College of Technology, Brooklyn, NY
3. Stephanie Kusano (Ph.D., Engineering Education) *(Virginia Tech)* (Co-advised with Lisa McNair; Graduated: December 2014)
   Thesis: Beyond the Classroom: Understanding the Educational Significance of Non-Curricular Engineering Design Experiences
   Job after graduation: Postdoctoral Associate at GMU
   Current Position: Evaluation and Assessment Postdoctoral Research Scholar, University of Michigan
4. Bushra Chowdhury (Ph.D., Engineering Education; Co-Chair: Vinod Lohani) (Virginia Tech); Topic: Collaborative Computational Thinking; Dissertation Defended: July 6, 2017
   Job after graduation: Data Scientist, DISYS Inc.
5. Omaima Almatrafi (Ph.D. IT) (Defended: October 10, 2018); *Title*: Analyzing MOOC Forums: Developing Models to Support Instructors' Monitoring of Learners' Post.
   Job after graduation: Assistant Professor, King AbdulAziz University, Saudi Arabia.

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‡ All Ph.D. students were fully funded on my grants throughout their doctoral work except for a mandatory semester of GTA position required by the department. M.S. students were fully funded by me throughout their program of study. For logistical reasons, I asked all students at VT to add a co-advisor after my decision to move to GMU. My department at VT did not have a M.S. program and the Ph.D. program started a year after I joined.

6. Hieu-Trung Le (Ph.D. IT) (Defended: 7/26/2019); *Topic*: Meeting Cybersecurity Education Challenges: A Data Analytics Approach for Continuous Learning.
   Job after graduation: Cloud Security Architect, Deutsche Bank
7. Habib Karbasian (Ph.D. IT) (Co-Advisor: Hemant Purohit) (Defended: 4/3/2020), Topic: Realtime Analytics for Resource Mobilization in Engineering Diversity Hashtag Campaigns.

M.S.
8. Raktim Mitra (Chair, Co-Chair: H. Rahmandad, M.S. Thesis, Industrial and Systems Engineering; Graduated August 2011)
   Thesis: Collaborative learning in Open-Source Software (OSS) communities: The dynamics and challenges in networked learning environments. *Job*: Analyst, Discover Financials; *Current Position*: Senior Manager, Lending Club
9. Ashwin Khandeparker (Chair, M.S. Project, Computer Science; Graduated May 2011)
   Thesis Project: Virginia Tech Knowledge Network (VTKN: Intradepartmental Collaboration within VT College of Engineering. *Job*: Developer, Amazon Inc.

Current

PhD
1. Ashish Hingle, Ph.D. in Information Technology (Concentration: Information Sciences & Technology) (Started: Fall 2020)
2. Johannes Schleiss, Ph.D. in Computer Science (AI); Otto-von-Guericke University, Magdeburg, Germany (Started: Fall 2021; Defended proposal: June 3, 2024) (Co-advisor, Advisor: Sebastian Stober)
3. Amrtia Ganguly, Ph.D. in Information Technology (Concentration: Information Sciences & Technology) (Started: Fall 2022)

Dissertation Committee Member
1. Jonathan Vasquez (PhD, CS) (Advisor: Huzefa Rangwala); Defended December 2, 2024
2. Ajay Kulkarni (PhD, CDS) (Advisor: Olga Gkountouna); Defended March 29, 2022
3. Carrie Klein (PhD. Higher Education) (Advisor: Jaime Lester); Defended March 16, 2020
4. Zhiyun Ren (Ph.D. CS) (Advisor: Huzefa Rangwala); Defended May 2, 2019
5. Bryan Weaver (Geography, Advisor: Dieter Pfoser); Collaborative Geospatial Investigations, Defended April 30, 2018
6. Sachin Garg (Public Policy, Advisor: Philip Auerswald); Big Data and Development: Focus on Land Records in the U.S. and India (Defended: August 2017)
7. Geetanjali Date (HBCSE, TIFR, India; Advisor: Sanjay Chandrasekharan); 2014-2019 (Expected); *Grassroots Innovation in Rural India (Proposal Defended: August 7, 2015)*
8. Cory Brozina (Engineering Education, Virginia Tech, Advisor: David B. Knight); 2012-2015; *Educational Data Mining: Linking Multiple Datasets*
9. Jacob Moore (Engineering Education, Advisor: Chris Williams) 2010-2013 – *Adaptive Map Project*
10. Jean Mohammadi-Aragh (Engineering Education, Advisor: Chris Williams) 2009-2013 – *Student Attention in Technology-Rich Classrooms*
11. Joon Suk Lee (Computer Science, Advisor: Deborah Tatar) 2009-2013 – *Collaboration and Micro-coordination in Technology Mediated Settings*
12. Rachel McCord (Engineering Education, Advisor: Holly Matusovich) 2011-2013 – *Metacognition and Self-Regulation for Conceptual Learning in Engineering*

Student Supervision/Co-Supervision on Funded Projects[§]

68. Hyuna Lee (M.A. Sociology) – Fall 2023 – *AI Literacy*
67. DJ Thompson (B.S., Industrial Design, ISU, REU, Summer – Fall 2023) –*AI & Agriculture*
66. Eve Magill (B.S., Industrial Design, ISU, REU, Summer – Fall 2023) – *AI & Agriculture*
65. Spencer Lines (B.S., Industrial Design, ISU, REU, Summer – Fall 2023) – *AI & Agriculture*
64. Brayden Jones (B.S., Industrial Design, ISU, REU, Summer 2023) – *AI & Agriculture*
63. Brianna Chaplin (B.S., Industrial Design, ISU, REU, Summer – Fall 2023) – *AI & Agriculture*
62. Cali McKibbon (B.S., Industrial Design, ISU, REU, Summer – Fall 2023) – *AI & Agriculture*
61. Kalon Thompson (B.S., Industrial Design, ISU, REU, Summer – Fall 2023) – *AI & Agriculture*
60. Karthika Suresh Kumar (M.S., Industrial Design, ISU, Summer 2023) – *AI Literacy & Ethical AI Design*
59. Shruti Mehta (Ph.D. IT, Spring 2023) – *AI Ethics Education*
58. Marly Saravia (NSF REU, Summer 2022; Provost's grant Fall 2022, Spring 2023) – *AI Literacy*
57. Georga Hackworth (NSF REU, Summer 2022) – *AI Ethics Education*
56. Natalie Plahuta (MFA, Summer 2022, Fall 2022, Spring 2023, Summer 2023) – *AI Literacy*
55. Elizabeth Terrell (MFA, Summer 2022) – *AI Ethics Education*
54. George Guay (PhD, Summer 2022) – *AI Ethics Education*
53. Areej Ali (B.S. IT, NSF REU, Summer 2021, 2022, 2023-2024) - *AI in Agriculture, Generative AI policy*
52. Brett Strosnider (B.S. IT, NSF REU,Summer 2021) – *Analysis of Twitter Data Related to AI Ethics*
51. Stefano Murro (NSF REU, Summer 2021) – *Analysis of Qualitative Data on IT Ethics*
50. James Condo (NSF REU, Summer 2021) - *Analysis of Qualitative Data on IT Ethics*
49. Sarish Zahid (B.S. IT, NSF REU, Summer 2021) – *Case Study of AI in Agriculture*
48. Ghaaliyah Brown (NSF REU, Summer 2021) - *Analysis of Twitter Data Related to AI Ethics*
47. Pearl Matibe (NSF REU, Summer 2021) – *Case Study of Global AI Ethics*
46. Victoria Dilliott (Youngstown State, NSF REU, Summer 2021) – *Analysis of Qualitative Data on IT Ethics*
45. Venkata Ramana Pola (M.S. Data Analytics Engineering), Fall 2019 – Spring 2020
44. Byron Biney (Swarthmore College) (REU, Summer 2018)
43. Olivia Kruse (Junaita College) (REU, Summer 2018)
42. Lorraine M. Drumheller (Ph.D. Higher Education), Fall 2017- Spring 2018, *Data Science Education*
41. Daniel Ruiz (B.S. Computer Engineering, VCU, REU) (Summer – Fall 2017)
40. Cassie Heyman-Schrum (William and Mary, REU) (Summer – Fall 2017)
39. Venkata Chaitanya Neelamaraju (M.S. ECE) (Spring 2017)
38. Saif Ahmed (M.S. DAE), 2014-2015 – *Comparative Study of Technical/Non-Technical Forums; Summer Internship*: HP Labs Data Mining Group
37. Ben Gelman (B.S. & M.S. C.S., NSF REU/GRA) 2014-2016 – *Analysis of Scratch Online Community and Learning on MOOCS; Summer Internship*: MIT CSAIL ALFA Group
36. Chris Beckley (B.S. C.S., NSF REU) 2014 – *Analysis of Scratch Online Community*; *Job*: Lockheed Martin
35. Mack Sweeney (B.S. C.S., NSF REU) 2014 – *DIA2*
34. Qingzhe Li (Ph.D. C.S.) 2014 – *Android App Development*
33. Matt Revelle (Ph.D. C.S.) 2014- *DIA2*
32. Heba Elsherbeeny (PhD. Ed) 2014 – *TILES: Informal Engineering Learning Assessment Instrument*
31. Kathy Matson (PhD. Ed) 2014 – *TILES: Informal Engineering Learning Literature Review*
30. Laura Tokarcyk (PhD. Ed) 2014 – *TILES: Informal Engineering Learning Assessment Instrument Development*
29. Ashley Sgandurra (M.A. Ed) 2014 – *TILES: Informal Engineering Learning Assessment Instrument Development*

[§] Students listed here were funded by grants on which **I served as PI or as primary REU mentor**. The following collaborators co-supervised one or more students: N. Ranade (GMU), H. Rangwala (GMU), L. Bland (GMU), C. Domeniconi (GMU), H. Purohit (GMU), A. Sharma (ISU/VT), & J. Lo (VT).

28. Xingya Xu (PhD. Ed) (Fall 2015 – Spring 2016) – *TILES: Informal Engineering Learning*

27. Habib Karbasian (PhD. CS) (Fall 2016) (joined research group as doctoral advisee Spring 2017)

26. Rajat Handa (M.S. DAE) (Fall 2016 – Spring 2017)

25. Krunal Doshi (M.S. CS), GRA 2011-2012

24. Vaishali Nandy (Ph.D. Education), GRA, 2010-2013 – *Globally Distributed Work Case Studies*

23. Xiaomo Liu (Ph.D. CS) 2009-2011 – *Harnessing Global Expertise in Online Communities*

22. Gaurav Dongaonkar (M.S. ISE) 2010 – *Globally Distributed Work Case Studies*

21. Monique Dufour (Ph.D. STS) 2009-2011 – *NSF AdWiki*

20. James Pembridge (Ph.D. ENGE) 2008-2009 – *NSF Creative IT*

19. Varun Ramdas (M.S. ISE) 2007-2008 – *Globally Distributed Work*

18. Asta Schram (PhD. Education) 2009-2010 – *Digital Millennials*

17. Prasanna Kumar (Ph.D. ISE) 2009-2010 – *Analysis of Field Study Data of Global Work*

16. Shreya Kothaneth (Ph.D. ISE) 2008-2011 – *NSF Creative IT*; served as dissertation co-chair 2009-2011

15. Daniel Breakiron (B.S. CS) 10 – *NSF AdWiki*

14. Younes Taleb (B.S. General Engineering) 2010 – *NSF AdWiki*

13. Andrew Ciambrone (B.S. General Engineering) 2012 – *NSF CAREER Award*

12. Vismay Shah (B.S. ISE) 2008-2010 – *Research on Engineering Education in India*

11. Daniel Shanahan (M.S. CS) 2009-2011 – *NSF AdWiki*

10. Jonathan Ballands (B.S. CS) 2010-2012 – *Android App Development for Immune*

9. Kevin Cherniawski (B.S. CS, University of Mary Washington NSF REU)

8. Erin Campbell (B.S. CS, Kalamazoo College, NSF REU) 2011 – *Android App Development for Immune*

7. Lina Garada (B.S. Industrial Design, NSF REU) 2011-2012 – *NSF Creative IT* and *Immune/LaXmi*

6. Daniel Calabrese (B.S. Industrial Design, NSF REU) 2011 – *Immune/LaXmi*

5. Greg Mitchell (B.S. Industrial Design) 2011 – *Immune/LaXmi*

4. Daniel Wainless (B.S. Industrial Design) 2011 – *Immune/LaXmi*

3. Dow Lodovico (B.S. Industrial Design) 2011 – *Immune/LaXmi*

2. Nihar Simal (B.S., ME) 2011 – *NSF CAREER Award—Analysis of Field Study Data on Global Work*

1. Sumitra Nair (Ph.D. STS) 2009-2010, *Field Study of NREGA*

Research Associate

1. Dr. Aayushi Hingle Collier (PhD. GMU) Fall 2023 – *GenAI policies*
2. Dr. Omaima Almatrafi (PhD. GMU), Fall-Spring 2023-2024 – *AI Literacy and Education*
3. Dr. Bushra Chowdhury (Ph.D. Virginia Tech) (November 2017 – August 2018) – *Data Science for Beginners*
4. Elizabeth Grisham (Jan. 2017-July 2017) – *Engineers/Engineering in India*

Teaching Experience[**]

Graduate

Instructor	AIT 790: AI and Education*	Spring 2025
Instructor	AIT 679: Ethics and Law of Big Data*	Spring 2023
Instructor	AIT 602: Research Methods in IST*	Spring 2018, Spring 2016
Instructor	AIT 601: Foundations of IST*	Fall 2015
Instructor	AIT 510: Learning Analytics*	Fall 2014
Instructor	ENGE 5984: Ethnographic and Qualitative Research*	Spring 2013, Fall 2009
Instructor	ENGE 5014: Foundations of Engineering Education*	Fall 2012, Fall 2011, Fall 2009, Fall 2008, Spring 2008
Instructor	ENGE 5984: Global Engineering Work Practices*	Spring 2010, Spring 2009
Instructor	ED211: Human-Computer Interaction in Education*	Fall 2004

Undergraduate

Instructor	IT 304: IT in the Global Economy* (~40 students/section)	Fall 2024 (2 sections)
		Spring 2024 (1 section)
		Fall 2023 (2 sections)
		Fall 2022 (2 sections)
		Summer (2022) (1 section)
		Summer (2021) (1 section)
		Spring 2021 (1 section)
		Fall 2020* (2 sections)
		Fall 2019 (4 sections)
		Fall 2018 (2 sections)
		Spring 2018 (2 sections)
		Fall 2017 (1 section)
		Spring 2017 (2 sections)
		Fall 2016 (1 section)
Instructor	ENGE/ID 2984: Engineering Design for Empowerment*	Fall 2012
Instructor	ENGE 1214: Engineering Design Transitions	Fall 2012
Instructor	ENGE 1114: Engineering Design*	Spring 2012, Spring 2011
Instructor	ENGE/CS/ID 2984: Eng Design for Social Development	Fall 2011
Instructor	ENGE 1024: Engineering Explorations	Fall 2007

Guest Lectures

1. "Ethics of AI in Agriculture," CMU, AI & Robotics, Instructor: George Kantor (4/19/2022)
2. "Introduction to Engineering Education," PROV 701, Instructor: K. Schrum (2/21/2017)
3. "Writing a Grant Proposal", PROV 701, Instructor: J. Lester (2/7/2015 & 2/5/2016)
4. "Assessing Informal Engineering Learning," EDUC, Instructor: L. Bland (2/3/2015)
5. "Why a Science of Learning" presented at the Learning Sciences class, School of Education, September 10, 2012. Instructor: M. Evans
6. "Sociomateriality and Learning" presented at the Learning Sciences class, School of Education, November 8, 2011. Instructor: M. Evans
7. "ICT for Development" presented at the Freshmen Research Seminar, September 23, 2011.
8. "India in the Flat World and Beyond" presented as part of the Engineering Cultures course in the Department of Science & Technology Studies, Virginia Tech.

[**] Courses marked * are new offerings or a substantial redesign of a prior offering.

- Presented twice (2009 and 2010) to over 100 students each semester (Instructor: M. Wisnioski).
- Presented in Spring 2012 as part of the Rising Sophomore study abroad course (Instructor: S. Adams).

9. "Design Ethnography: Data Collection and Analysis". Presented in Graduate Class on "Design Cultures", (2008, 2011), Department of Science & Technology Studies, Virginia Tech. Instructor: Matt Wisnioski

10. Using Dyknow in Engineering Classes. Presentation and Demonstration in Graduate Class on Engineering Technology (2007), School of Education, Virginia Tech. Instructor: Michael Evans

11. Lecture on "Globalization and Work" presented as part of the Rising Sophomore study abroad course, March 2010. Instructor: J. Tront

12. Lecture on the topic of "Activity Theory" presented as part of the graduate course on "Sociocultural Influences on Learning', February 2011, School of Education. Instructor: C. Brandt

13. Workshop on "Introduction to Cyberinfrastructure for Engineering Education Research, Learning, and Outreach" with Krishna Madhavan (Purdue University), delivered at NSF Awardees Meeting Feb 1 & 2, 2010. Two sessions of the workshop were conducted.

Service to the Institution and the Profession

Institutional Service

George Mason University
University Level
SoC Representative to the Faculty Senate, elected position, Fall 2024 -
Mentor, Teaching Excellence Award 2022-2023
Member, Mason Core Taskforce for Just Society Course Fall 2021
Member, Research Committee, Presidential Taskforce on Anti-Racism and Inclusiveness 2020-2021
Member, Anti-Racist and Inclusive Teaching (ARIT) Resource Development Team Spring 2021
VSE Representative to the Faculty Senate, elected position, Fall 2017-Spring 2021
Member, University Research Advisory Committee (2020-2021)
Member, University Committee on Technology Policy (Fall 2019-Spring 2021)
Member, University Committee on Adult Learning and Executive Education (Fall 2017-Spring 2019)
Member, Search Committee for Associate Provost for Institutional Research and Assessment (Spring 2015)
Member, PW Campus Committee for Bull Run 2 (Spring 2014)
Member, Writing Across the Curriculum (2014-2015)

College/School Level
Member, Full Professor Promotion Committee, Dept. of Civil, Env., & Infra. Engineering (CEIE), 2022-2023
Member, Search Committee for Communications Specialist, 2021
IST Representative, VSE Faculty Promotion Committee 2020-2021
Member, Search Committee for Tenured/Tenure-Track Faculty, Computer Science, 2019-2020
IST Representative, VSE Faculty Promotion Committee 2019-2020
IST Representative, VSE Research Committee 2018 - 2020
Member, Search Committee for Term Faculty in Data Analytics, Computer Science, 2018-2019

Departmental Level
Chair, Tenure-Track/Tenure Faculty Promotion Committee 2024-2025
Member, Tenure-track/Tenured Faculty Hiring Committee 2023-2024
Member, Term Faculty Promotion and Renewal Committee 2023-2024
Chair, Term Faculty Promotion and Renewal Committee 2022-2023 (7 candidates)
Co-Chair, Tenure-Track Faculty Mentoring Committee, 2022-2023 (3 candidates)

Member, P&T Committee Tenured/Tenure-Track Faculty 2022-2023, 2023-2024

Member, Departmental PhD Committee, Spring 2021

Member, Departmental Strategic Planning Committee, Fall 2020-Spring 2021

Member, P&T Committee Tenured/Tenure-Track Faculty 2020-2021

Contributor, ABET Student Outcome Assessment Report (SOAR) 2020-2021

Chair, P&T Committee Tenured/Tenure-Track Faculty 2019-2020

Chair, P&T Committee Term Faculty 2019-2020

Member, Graduate Applications Review Committee 2019-2020

Member, Search Committee for Department Chair, IST (2019-2020),

Member, Search Committee, Tenure-Track Faculty, IST (2019-2020),

Member & Equity Champion, Search Committee for Tenured/Tenure-Track Faculty, IST, (2019-2020)

Chair, Faculty Renewal Committee (2018)

Department Chair (2014-2016)

- Co-led effort to create a Ph.D. concentration and introduce Ph.D. level courses within the IT PhD program (2014-2016); Resulted in a new concentration for the department: Information Science and Technology.
- Led the effort to change the department name from Applied IT to Information Sciences and Technology; this resulted in a new vision and mission for the department.
- Spearheaded the Academic Program Review (APR) for the department and ABET evaluation (2015).

Virginia Tech

University Level

Member of the team that created the *Interdisciplinary Graduate Education Program in Human Centered Design (IGEP-HCD)*

Member, Commission on Outreach and International Affairs (2012-2013)

Member, Commission on Equal Opportunity and Diversity (2008—2011), Virginia Tech

       Institutional Partnership Taskforce 2008-2009

       Campus Climate Taskforce 2009-2010

College Level

Member, International Program Faculty Committee (appointed by Dean, College of Engineering) (2011 -13)

Member, DyKnow Taskforce (2007-2009)

Marshall, Commencement Duties (Spring 2008-2011)

Reviewer, Reviewed NSF Career Proposals as part of a workshop organized by the college, also shared my proposal as an exemplar (2010-2013)

Founding contributor and Member, ICTAS Center on Innovation-based Manufacturing (CIbM)

Departmental Level

Member, Department of Engineering Education Faculty Search Committee (2012-13)

Faculty Mentor, New faculty hired in 2013; assisted with on-boarding and grant writing efforts (2013)

Member, Department of Engineering Education Graduate Committee (2007-2009) (2012-2013)

Co-Chair, Department of Engineering Education Strategic Planning Committee (2009 – 2011)

       Development of strategic plan in accord with faculty and advisory board

Member, Department Communication and Outreach Committee 2007-2009 (played a crucial role in recruiting the first full class of doctoral students in Fall 2008)

Member, Qualifying Exam Committee (2008-2013; once each year)

Undergraduate Advising: Around 50-100 freshmen/sophomore-level students each semester (2007-2010)

Service to the Profession

Member, Global AI Ethics Consortium (GAIEC), Institute for Ethics of AI (IEAI), Technical University of Munich, 2022 – Present

Editorial Board, European Journal of Engineering Education, 2022 - Present

Editorial Board, Engineering Studies, 2018 - Present
Associate Editor, Engineering Studies, 2012-2017

Editorial Advisory Board, Advances in Engineering Education, 2018 – Present

Editorial Advisory Board, Journal of STEM Education, 2021 – Present

Member, NSF CISE/SBE AC Sub-Committee on Research Portfolio Analysis 2012
Director, ASEE ERM Division 2018-2020 (*elected by the division members, ERM is the largest division within ASEE*)

External Project Advisory Boards
- NSF-IIS#1441149: EXP: Fostering Collaborative Drawing and Problem Solving through Digital Sketch and Touch (PI: E. Mercier; UIUC) (2014-2016)
- NSF-EHR #1439570: BCC: Collaborative Research: Community Building for Research on Mathematics Learning Using Data-Intensive Sources (PI: C. Maher, Rutgers) (2014-2016)
- NSF-EEC#1651511: CAREER: Characterizing Gendered Socialization of Newcomer Engineers to Promote Inclusive Practices and Retention of a Diverse Workforce (PI: K. Beddoes, SFSU) (2017-2022) (Renewed: 2023-2026)
- NSF-DUE#1821589 Collaborative Research: Building a Culture of Active Learning through Course-Based Communities of Transformation (PI: Jill Nelson, GMU) (2018-2023)
- NSF-EEC#1825732 Research: Staying the course: Understanding the motivational factors contributing to persistence among undergraduate engineering students in online courses. PIs: Samantha Brunhaver & Jennifer Bekki (ASU) (2018-2021)
- NSF-DUE# 1916521 Impact of Interactive Holographic Scenes in Developing Engineering Students' Competencies in Sensing Technologies. PIs: Abiola Akanmu, Diana Bairaktarova, et al. (VT) 2019-2022.
- NSF-EEC# 2339207 CAREER: Re-envisioning Engineering Pedagogy to Support a Range of Visuo-spatial Skills. PI: Grace Panther (UNL), (2024-2029)

Invited Participation in NSF Sponsored/Funded Workshops
Computer Science Education (Summer 2009), Blacksburg, VA
MOOCs and Learning Analytics (Oct. 2013), Helsinki, Finland
Big Data and Education (March 2014), Fairfax, VA
Ethics of Big Data and Education (July 2015), Arlington, VA
Future of Engineering Education Research (October 2015), Pittsburgh, PA

Program Committee Member
European Conference on Computer-Supported Cooperative Work 2009, 2011
MobileHCI, International Conference on Mobile Human-Computer Interaction 2009
International Conference on Design of Cooperative Systems 2010, 2012
2nd Conference on Computer-Human Interaction and Management of Information Technology (CHIMIT 2010)
9th Annual Workshop on HCI Research in MIS, Pre-ICIS, St. Louis, Missouri, December 12, 2010
8th ACM Conference on Creativity and Cognition, Nov. 3-6, 2011, Atlanta, GA

ACM CHI 2012, Program Committee Member, Work-in-Progress Submissions
ACM ICTD, 2013, 2015, 2017, 2019, 2020
ACM Conference on Computing and Sustainable Societies (COMPASS), 2018, 2019
Research in Engineering Education Symposium 2019
International Conference on Computer Ethics: Philosophical Enquiry 2023 (CEPE 2023)

Doctoral Consortium
SEFI 2024 *Mentor*
ACM Conference on Information and Communication Technology for Development (ICTD) 2019 *Co-Chair*

Reviewing
Grant Proposals
U.S. National Science Foundation College of Reviewers for Undergraduate Education (CRUE), July 2018 – June 2021 (new review model that consists of a standing panel of competitively selected experts)
U.S. National Science Foundation Panel and Site Reviews (2008 – present): 21 panels for IIS, CISE, DUE, CDI, SBE, EEC divisions and cross-directorate solicitations, including CAREER, ERC, and multiple ad-hoc reviews.
Apprenticeship Faculty Grant, ERM Division, ASEE 2021
Mentor, 2023 NSF ENG CAREER Proposal Workshop, Mock Panel Review Session
Indo-US Science & Technology Forum (IUSSTF) Proposal Review
South Africa's National Research Foundation (NRF) 2015, 2019
NSERC – Canada Research Council 2018, 2023
Croatian Science Foundation (HRZZ) 2021
Israel Science Foundation (ISF) 2024
Dutch Science Foundation 2024

Conference Reviewing
International Conference of Learning Sciences (ICLS) 2006, 2008, 2014, 2016
International Conference of Computer-Supported Cooperative Learning (CSCL) 2007, 2009, 2015
Annual Conference of American Society for Engineering Education (ASEE) 2014, 2015, 2016, 2017, 2018
American Education Research Association Conference (AERA) 2003, 2005
Annual Conference of the Academy of Management, 2006, 2007, 2008, 2009
Computer-Human Interaction Conference (CHI) 2003, 2005, 2006, 2009, 2010, 2017
Mobile HCI 2009
International Conference of Information Systems (ICIS) 2006, 2010, 2013
Persuasive Technology Conference, 2007
Computer Supported Cooperative Work (CSCW) 2006, 2008, 2011, 2012, 2013, 2014
HICSS, Learning Analytics Mini-track, 2012
Conference on Information and Communication Technology for Development (ICTD), 2013, 2015
The 6th International AAAI Conference on Weblogs and Social Media (ICWSM), 2012
ACM KDD 2014
ACM COMPASS 2018, 2019
REES 2019
Frontiers in Education 2021, 2022
SEFI 2022, 2023

Journals (Ad-hoc reviewer)
Journal of Engineering Education (JEE); International Journal of Engineering Education (IJEE); Advances in Engineering Education (AEE); European Journal of Engineering Education (EJEE); Engineering Studies;

Studies in Engineering Education (SEE); Journal of Professional Issues in Engineering Education and Practice (JPIEEP); Nordic Journal of Working Life Studies; Mind Culture and Activity (MCA); Culture and Psychology; The Journal of the Learning Sciences (JLS); Journal of Computer Supported Cooperative Work (JCSCW); International Journal of Human-Computer Studies (IJHCS); Information and Software Technology (IST); Decision Support Systems (DSS); Journal of the American Society for Information Science and Technology (JASIST); Journal of Information Technology Theory and Application (JITA); MIS Quarterly (MISQ); Computers and Human Behavior (CHB); Computers and Education (C&E); Journal of Computing in Higher Education (JCHE); International Journal of Sociotechnology and Knowledge Development (IJSKD); Management Learning; ACM Transactions of CHI (TOCHI); Information Technology and International Development (ITID); Information Technology and Development (ITD); Royal Society Open Journal; Proceedings of the ACM on Interactive, Multimedia, Wearable and Ubiquitous Technologies (IMWUT); South Asia Studies

Professional Memberships

American Society of Engineering Education (ASEE)
International Society of Learning Sciences (ISLS)
Association for Computing Machinery (ACM)
International Network of Engineering Studies (INES)
American Educational Research Association (AERA)

Media/Press Coverage

- "Inside Barnard's Pyramid Approach to AI Literacy, Lauren Coffey, InsideHigherEd, June 11, 2024, quotes our paper on AI literacy
- "Engineers are harnessing artificial intelligence to plow the fertile new field of precision farming," by Thomas K. Grose in ASEE Prism magazine, https://www.asee-prism.org/agriculture-4-0/
- "Aditya Johri receives Fulbright U.S. Scholar Award to Finland for research on AI ethics education", August 12, 2021, GMU News, https://www2.gmu.edu/news/2021-08/aditya-johri-receives-fulbright-us-scholar-award-finland-research-ai-ethics-education
- "Future agricultural workers learn technological farming practices," June 22, 2021, College of Engineering and Computing news, https://cec.gmu.edu/news/2021-06/future-agricultural-workers-learn-technological-farming-practices
- "Educators examine and explain algorithm ethics," July 17, 2020, Volgenau School of Engineering news https://volgenau.gmu.edu/news/587236
- "Philosopher Powers considers values in autonomous-vehicle debates," references Prism Column, https://www.philosophy.udel.edu/news/college/Pages/self-driving-ethics.aspx
- "Learning to Demo" paper covered in the Engineering Commons Podcast, August, 8, 2013, http://theengineeringcommons.com/episode-35-knowledge-network/
- "Stop using email for everything: How some companies have found new ways to communicate and collaborate." By Joel Mathis, Macworld.com Jun 18, 2012.
- "End of Email?" Financial Times, December 19, 2011.
- "Knowledge mining resource accelerates science, technology education, research." Physorg.com, October 13, 2011.
- "Four Virginia Tech engineering faculty selected for National Academy of Engineering symposium," October 11, 2011.
- "Advancing manufacturing jobs at home." Roanoke Times, May 16, 2011.
- "SHORING UP: Federal aid to states and grants to researchers may bring only temporary relief to universities." (Cover Story). PRISM, ASEE Magazine, January 2010.