

NITIN VERMA, PH.D.

nverma23@asu.edu | nverma.net | [GScholar](#) | [ORCID](#)
September 12, 2024

Postdoctoral Research Scholar in AI & Society (August 2023 – Present)
School for the Future of Innovation in Society, Arizona State University (ASU)
The New York Academy of Sciences (NYAS)
Supervisor: Dr. David Guston

EDUCATION

Ph.D. Information Studies, School of Information, The University of Texas at Austin (2023)
Dissertation Title: *Deepfake Technology and the Future of Public Trust in Video*
Committee: Dr. Kenneth R. Fleischmann (chair), Dr. Jacek Gwizdka, Dr. Ahmer Arif, Dr. Sharon Strover
M.S. Information Studies, School of Information, The University of Texas at Austin (2017)
M.Sc. Informatics, University of Delhi, India (2006)
B.Sc. Electronics (with Honors), University of Delhi, India (2004)

WORKS IN PROGRESS

RESEARCH PROJECTS

AI in Peer Review: This project is aimed at studying the implications of integrating AI in the peer-review process including issues of bias, privacy & confidentiality, and journal policy compliance. This work will culminate in a grant proposal to the NSF's Science-of-Science program.

State of US Legislation on Deepfakes: The aim of this project is to study and analyze the nearly 75 Congressional bill texts on deepfakes and comparing them with industry-led efforts like C2PA, to identify gaps between federal regulation and technology companies.

LLM-based Chatbots in Health: This collaborative project explores the advantages of LLM-based chatbots for cost-effective health advice, as well as the potential risks pertaining to the accuracy of health information and equitable access to healthcare.

Re-Envisioning RLHF (Reinforcement Learning from Human Feedback): In collaboration with industry and academic experts, I am working to include active public feedback in RLHF-based ML systems to mitigate bias and foster inclusivity in AI system design.

GRANT APPLICATIONS

In Preparation for the [NSF Science-of-Science \(SoS\) program](#): **Should AI be Used in the Scientific Peer-Review Process?** An Exploration of the Opportunities and Concerns Relating to the Use of AI in Scientific Knowledge Production.

MANUSCRIPTS UNDER REVIEW

Verma, N., (Under Review). [[On conceptualizing trust in video in the wake of deepfake technology](#)]. [*Under review at a top-tier peer-reviewed journal on the societal implications of AI*].

PEER-REVIEWED JOURNAL ARTICLES

Shiroma, K., Zimmerman, T., Xie, B., Fleischmann, K.R., Rich, K., Lee, M.K., **Verma, N.**, & Jia, C. (2023). Older adults' trust and distrust in COVID-19 public health information: A qualitative critical incident study. *JMIR Aging*. [DOI]

Verma, N., Fleischmann, K., & Koltai, K. (2023). Designing adaptive, mixed-mode HCI research for resilience. *Interacting with Computers*. [DOI]

Zimmerman, T., Shiroma, K., Fleischmann, K. R., Xie, B., Jia, C., **Verma, N.**, & Lee, M. K. (2023). Misinformation and COVID-19 Vaccine Hesitancy. *Vaccine*. [DOI]

Verma, N., Fleischmann, K. R., Zhou, L., Xie, B., Lee, M. K., Rich, K., Shiroma, K., Jia, C., & Zimmerman, T. (2022). Trust in COVID-19 public health information. *Journal of the Association for Information Science and Technology (JASIST)*. [DOI]

Slota, S. C., Fleischmann, K. R., Greenberg, S. R., **Verma, N.**, Cummings, B., Li, L., & Shenefiel, C. (2022). Locating the work of AI ethics. *Journal of the Association for Information Science and Technology (JASIST)*. [DOI]

Slota, S. C., Fleischmann, K. R., Greenberg, S. R., **Verma, N.**, Cummings, B., Li, L., & Shenefiel, C. (2021). Many hands make many fingers to point: Challenges in creating accountable AI. *AI & Society*. [DOI]

PEER-REVIEWED CONFERENCE PROCEEDINGS PAPERS

Verma, N. (2024). "One Video Could Start a War": A Qualitative Interview Study of Public Perceptions of Deepfake Technology. *Proceedings of the Association for Information Science and Technology (ASIS&T)*.

Hatfield, K., Ezenyilimba, A., **Verma, N.**, Mesa, J. J., Moon, S.E., Tibbetts, E., Turaga, P., Pavlic, T.P. (2024). Fine-tuned thin-plate spline motion model for manipulating social information in paper-wasp colonies. *IEEE/CVF Workshop on CV4Animals (in conjunction with IEEE CVPR)*.

Stangl, A., **Verma, N.**, Fleischmann, K. R., Morris, M. R., & Gurari, D. (2021). Going beyond one-size-fits-all image descriptions to satisfy the information wants of people who are blind or have low vision. *Proceedings of the 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '21)*. [DOI]

Verma, N., Shiroma K., Rich K., Fleischmann K. R., Xie B., & Lee M. K. (2021). Conducting quantitative research with hard-to-reach-online populations: Using prime panels to rapidly survey older adults during a pandemic. In: Toeppe K., Yan H., Chu S.K.W. (eds) *Diversity, Divergence, Dialogue* (pp. 384–393). *iConference 2021*. Lecture Notes in Computer Science, Vol. 12646. Springer, Cham. [DOI]

Slota, S. C., Fleischmann, K. R., Greenberg, S., **Verma, N.**, Cummings, B., Li, L., & Shenefiel, C. (2021). Something new versus tried and true: Ensuring 'innovative' AI is 'good' AI. In: Toeppe K., Yan H., Chu S. K. W. (eds) *Diversity, Divergence, Dialogue* (pp. 24–32). *iConference 2021*. Lecture Notes in Computer Science, Vol. 12646. Springer, Cham. [DOI]

Slota, S. C., Fleischmann, K. R., Greenberg, S., **Verma, N.**, Cummings, B., Li, L., & Shenefiel, C. (2020). Good systems, bad data? Interpretations of AI hype and failures. *Proceedings of the Association for Information Science and Technology (ASIS&T)*, 57(1), e275. [DOI]

Verma, N., Fleischmann, K. R., & Koltai, K. S. (2019). Understanding online trust and information behavior using demographics and human values. In: Taylor N., Christian-Lamb C., Martin M., Nardi B. (eds) *Information in Contemporary Society* (pp. 654–665). *iConference 2019*. Lecture Notes in Computer Science, vol 11420. Springer, Cham. [DOI]

Verma, N., Fleischmann, K. R., & Koltai, K. S. (2018). Demographic factors and trust in different news sources. *Proceedings of the Association for Information Science and Technology*, 55(1), 524–533. [DOI]

Verma, N., Fleischmann, K. R., & Koltai, K. S. (2017). Human values and trust in scientific journals, the mainstream media and fake news. *Proceedings of the Association for Information Science and Technology*, 54(1), 426–435. [DOI]

Karadkar, U. P., **Verma, N.**, Dong, L., Galloway, P., Obaseki, V., & Davis, K. (2017). Digital preservation and compliance-based access for privacy-sensitive records. *2017 Texas Conference on Digital Libraries*. Austin, TX, USA.

REFEREED WORKSHOP PAPERS AND POSTERS

Verma, N. (2024). Public perspectives on how society should respond to deepfake technology: Findings from a qualitative interview study. *2024 IDEaS Conference*, September 18–20, 2024, Pittsburgh, PA, USA

Verma, N. (2023). Synthetic Media: A Credible Threat to the Credibility of Professional Photojournalists. *The 73rd Annual International Communication Association (ICA) Conference*, May 25–29, 2023, Toronto, ON, Canada.

Verma, N. (2022). Artifice in the artifact: Deepfakes and the future of trust in visual media. *The 18th Annual Social Informatics Research Symposium and the 4th Annual Information Ethics and Policy Symposium: Resilient Sociotechnical Systems for Social Good*. October 29, 2022, Pittsburgh, PA, USA.

Verma, N. (2022). Understanding deepfakes from an evolutionary perspective. *72nd Annual International Communication Association (ICA) Conference*, May 26–30, 2022, Paris, France.

Fleischmann, K. R., Greenberg, S. R., Longoria, R. G., Hill, K. M., Pejlatowicz, P. M., Bendana, J., Slota, S. C., **Verma, N.**, & Ko, E. G. (2022). Smart hand tools: Leveraging AI to empower blue-collar workers. *iConference 2022*. February 28 – March 4, 2022. Online.

Verma, N., Fleischmann, K. R., & Koltai, K. S. (2021). From the crowd to the lab: Replicating a crowdsourced information behavior data collection in a usability lab. *ASIS&T SIG-USE 2021 21st Annual Research Symposium*. Online.

Verma, N. (2020). Deepfakes and disinformation: A grand challenge for information behavior research. *ASIS&T SIG-USE 2020 20th Annual Research Symposium*. Virtual.

Fleischmann, K. R., Xie, B., Lee, M. K., **Verma, N.**, Shiroma, K., Rich, K., Sagna, A., Davis, N., Jia, C., Zhang, A., & Zimmerman, T. (2020). Trust in health information about COVID-19: Age, eHealth literacy, and human values. Presented at *The University of Texas at Austin COVID-19 Conference*. Virtual.

Verma, N., Shiroma, K., Rich, K., Fleischmann, K. R., Xie, B., & Lee, M. K. (2020). Studying the COVID-19 related health information behavior of older and younger adults. Poster presented at *The University of Texas at Austin COVID-19 Conference*. Virtual.

Verma, N., & Day, J. R. (2020). Accessibility of citation formats in scholarly publications for visually impaired readers. *Public Interest Technology University Network (PIT-UN) Conference on Undergraduate Informatics Education*. Austin, TX, USA.

Fleischmann, K. R., Simons, R. N., Greenberg, S. R., Gurari, D., Stangl, A., **Verma, N.**, Day, J. R., & Yeh, T. (2019). Good Systems: Ethical AI for CSCW. *ACM Conference on Computer-Supported Cooperative Work and Social Computing*. Austin, Texas, USA.

Verma, N., Fleischmann, K. R., & Koltai, K. S. (2018). [Understanding the information experience of fake news](#). *ASIS&T SIG-USE Symposium: Moving Toward the Future of Information Behavior Research and Practice*, Vancouver, BC, Canada.

Verma, N., (2018). [Knowledge practices and information behavior in astrology](#). *ASIS&T SIG-USE Symposium: Moving Toward the Future of Information Behavior Research and Practice*, Vancouver, BC, Canada.

Fleischmann, K. R., Koltai, K. S., & **Verma, N.** (2017). [Entitled to your own facts: The social informatics of knowledge in the era of fake news](#). *ASIS&T SIG-SI Research Symposium on the Social Informatics of Knowledge*, Crystal City, VA, USA.

NON-PEER-REVIEWED ARTICLES

Verma, N. (2024, August 29). [The Ethics of Developing Voice Biometrics](#). *The New York Academy of Sciences*. [\[Link\]](#)

Verma, N. (2024, August 22). [Have we passed the Turing Test, and should we really be trying?](#) *The New York Academy of Sciences*. [\[Link\]](#)

Verma, N. (2024, August 13). [A More Scientific Approach to AI and Machine Learning](#). *The New York Academy of Sciences*. [\[Link\]](#)

RESEARCH EXPERIENCE

GRADUATE RESEARCH ASSISTANT

- **Co-Creating a Community Hub for Smart Mobility: A University-Government-Nonprofit Partnership** (Summer 2022)
 - *Supervisor:* Dr. Kenneth R. Fleischmann
 - *Funded by:* The National Science Foundation (NSF Award # 2043060)
 - *Summary:* This project addresses housing and employment disparities in US cities by bringing together civic partners to co-create Community Hubs for Smart Mobility to extend access to transportation to vulnerable and marginalized neighborhoods.
- **Trust in Public Health Information During a Pandemic** (Summer 2020 – Summer 2021)
 - *Supervisor:* Dr. Kenneth R. Fleischmann
 - *Funded by:* The National Science Foundation (NSF Award # 2027426)
 - *Summary:* The project is aimed at understanding the factors that affect older and younger American adults' trust in public health information during the COVID-19 pandemic.
- **Microsoft Ability Initiative** (Fall 2019 – Spring 2020)
 - *Supervisor:* Dr. Kenneth R. Fleischmann
 - *Funded by:* Microsoft Research
 - *Summary:* The project aims at bridging the gap between humans and computer algorithms in describing visual images. The desired outcome of this project is to empower people who are blind or have low vision to better understand their visual surroundings.
- **The Information Experience of Fake News** (Summer 2019)
 - *Supervisor:* Dr. Kenneth R. Fleischmann
 - *Funded by:* Louis T. Yule Regents Professorship in Library and Information Science
 - *Summary:* A usability lab study to study how people interact with scientific information from various sources, building directly on our earlier MTurk study of scientific (dis)information.

- **Field Research with Policy, Legal, and Technological Experts About Transparency, Trust, and Agency in Machine Learning** (Fall 2018 – Spring 2019)
 - *Supervisor:* Dr. Kenneth R. Fleischmann
 - *Funded by:* Cisco Research Center
 - *Summary:* Interview-based study of the ethical, legal, and policy implications of AI/ML.
- **Personality Trait Detection in Mobile Apps for Targeted Advertising** (2015–2016)
 - Dept. of Information, Risk, and Operations Management, McCombs School of Business, The University of Texas at Austin
 - *Supervisor:* Dr. Rajiv Garg
 - *Summary:* Analyzed social media posts pertaining to mobile apps to infer the Big Five personality traits, and the influence of social media-based advertisement on buying behavior.

GRADUATE ASSISTANT

- **“Central Lunatic Asylum for Colored Insane” Archives Project** (2016–2017)
 - School of Information, The University of Texas at Austin
 - *Supervisor:* Dr. Unmil Karadkar
 - *Funded by:* The Andrew W. Mellon Foundation
 - *Summary:* Created a script-based workflow for ingestion of digital representations of historically significant physical documents belonging to the Central State Hospital in Virginia.

STUDENT TECHNICIAN

- **Infographic Design for ‘Doing Innovation’ Portal for Millennial Youth**
 - Radio-Television-Film, Moody College of Communication, The University of Texas at Austin
 - *Supervisor:* Dr. S. Craig Watkins
 - *Summary:* Created infographics for the portal doinginnovation.org (website now defunct).

TEACHING EXPERIENCE

ASSISTANT INSTRUCTOR

- **Ethical Foundations for Informatics (Undergraduate)** – Spring 2022
 - *Role:* Section Instructor of Record
 - *Lead Instructor:* Dr. Kenneth R. Fleischmann
- **Introduction to Informatics (Undergraduate)** — Fall 2021
 - *Role:* Section Instructor of Record
 - *Lead Instructor:* Dr. Craig Blaha

TEACHING ASSISTANT

- **Professional Experience & Project (Graduate Capstone)** — Summer 2018
 - *Supervisor:* Dr. Lorie Roy
 - *Summary:* Facilitated class discussions about preparation and reporting of student projects; and helped students format, print, and present capstone posters.
- **Access/Reference in Libraries/Archives (Graduate)** — Summer 2018
 - *Supervisors:* Samantha Cook and Kate Pauquette
 - *Summary:* Graded and engaged with weekly discussion posts submitted by students.

TEACHING INTERESTS

- Fundamentals of Information Science, Artificial Intelligence, and Machine Learning
- Ethical foundations of research and scholarship

- Research design and methods
- Programming fundamentals (Python, R, C, JavaScript)
- Undergraduate and graduate level writing, digital scholarship

INDUSTRY EXPERIENCE

- Catvision-Unitron Pvt. Ltd. *Sr. System Software Engineer* (2014–2015)
 - Created a core software module for the encryption-based licensing subsystem for the company's CATV head-end equipment.
- STMicroelectronics India Pvt. Ltd. *Technical Leader* (2008–2014)
 - Developed and tested a range of firmware and middleware modules for system-on-chip products for mobile devices; lead middleware validation efforts for the camera/imaging module.
- Bharti Telesoft Ltd. *Software Engineer* (2006–2008)
 - Developed software back-end for mobile network value-added-services

FELLOWSHIPS & AWARDS

- *Graduate School Continuing Fellowship*, The University of Texas at Austin, 2022–2023
- *iSchools Research Grant*, December 2021, iSchools Inc., **\$3,200**
- *iConference 2021 Best Short Research Paper Award*, with Stephen C. Slota, Kenneth R. Fleischmann, Sherri Greenberg, Brenna Cummings, Lan Li, and Chris Shenefiel, 2021
- *University Graduate Continuing Fellowship*, The University of Texas at Austin, 2020–2021
- *Civic Futures Award, Designing for the 100%*, with Danna Gurari, Kenneth R. Fleischmann, Abigale Stangl, Rachel N. Simons, Nilavra Bhattacharya, Jaxsen Day, Yanan Wang, Xiaoyu Zeng, Meng Zhang, and Yinan Zhou, 2019
- *Dean's Graduate Recruitment Fellowship*, The University of Texas at Austin, 2017–2021
- *Bullard Scholar Fellowship*, The University of Texas at Austin, 2017–2018
- *Graduate Student Professional Development Travel Award*, The University of Texas at Austin: 2017 – 2018, 2018–2019, 2019–2020

PROFESSIONAL DEVELOPMENT AND TRAINING

- *How to Effectively Communicate Your Science to Any Audience*. Online Course at the New York Academy of Sciences, March 2024 ([Link to certificate](#))
- ***NNCI (National Nanotechnology Coordinated Infrastructure) Winter School: Accelerating Impactful Scholarship***, January 3–10, 2024, Mesa, AZ
- *Adult Mental Health First Aid USA*—National Council for Mental Wellbeing, November 2023
- *Increasing Influence, Impacting Policy: Training in Effective Communications with Policymakers*—The New York Academy of Sciences, October 2023 ([Link to certificate](#))
- *ACM Conference on Fairness, Accountability, and Transparency (ACM FAccT) Doctoral Consortium*, June 2022, Online
- *Association for Information Science and Technology (ASIS&T) Doctoral Colloquium*, October 2021, Online
- *Association of Internet Researchers (AoIR) Doctoral Colloquium*, October 2021, Online
- ***Harvard STS Summer School: Expertise, Trust and Public Policy***, August 2019, Cambridge, MA

INVITED TALKS & PANELS

- *Deepfake Technology and the Future of Public Trust in Video*. The Lyceum Society of the New York Academy of Sciences. March 4, 2024
- *Deepfakes and the Future of Trust in Audiovisual Media*. International House, New York. February 17, 2024
- *AI for Good*: Notley Fellows Speaker Series panel. Online. August 26, 2021
- *Deepfakes and Disinformation: A Grand Challenge for Information Behavior Research*. Biomedical Informatics Seminar Series, University of New Mexico Health Sciences Library and Informatics Center. <https://libguides.health.unm.edu/blog/HSLICs-Biomedical-Informatics-Seminar-Series-presents-Nitin-Verma-MSIS>. January 21, 2021
- Guest speaker on KVRX 91.7 *Small Talk Radio* segment on Ethical AI Technology. October 13, 2019.

SERVICE & COMMUNITY INVOLVEMENT

- **Associate Editor**, *ACM Journal on Responsible Computing*. [\[Link\]](#)
- **Scientist-in-Residence** at NYAS to help middle school students (in Brooklyn, NY) conduct STEM research projects during Spring–Summer 2024.
- Served as a Student Volunteer at the *ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR) 2023* in Austin, TX
- Peer reviewer for the following journals and conferences:
 - *ACM Journal on Responsible Computing*
 - *Telematics and Informatics*
 - *Journal of Information Science (JIS)*: 2017–Present
 - *Cognition*: 2021, 2022
 - *iConference*: 2019–Present
 - *International Communication Association (ICA)*: 2022
- Paper panel moderator at iConference 2021 (Online)
- Ethics of AI Search Open Rank Faculty Committee member, University of Texas at Austin, 2019–2020
- Global Flows of (Dis)Information Open Rank Faculty Search Committee member, University of Texas at Austin, 2019–2020
- Colloquium Committee member, University of Texas at Austin, 2019–2020
- Undergraduate Curriculum Committee member, School of Information, University of Texas at Austin, September 2018–August 2019; September 2020–August 2021
- SASI (Student Association for the School of Information) Faculty Liaison, University of Texas at Austin, September 2017–2018.

RESEARCH SKILLS

- **Data Collection**: Online surveys, lab experiments (eye-tracking and facial expression recognition), participant panels, interviews, participant observation
- **Data Analysis**: Inferential statistics, qualitative thematic analysis, regression and linear modeling, path analysis, social network analysis (in R), geo-spatial data analysis (in R), data visualization (Tidyverse/ggplot2).
- **Programming Skills**: R (Tidyverse), Python, C, HTML/JavaScript, JSON, Java, Relational Databases and SQL.