HUIMIN XU - CV

Education

PH.D. in Information Studies, University of Texas at Austin, US	2021-present
M.A. in School of Journalism and Communication, Nanjing University, China	2018-2021
B.A. in School of Information Management, Nanjing University, China	2014-2018

Research Interests

Computational Social Science, Team Science, Human AI Teaming [google scholar]

Team Diversity and Leadership in Collaboration

- Investigate how team diversity and leadership influence innovation and impact in 30 million scientific teams using advanced network analysis, and AI explainable techniques
- Explore how leadership within team hierarchies shapes the retention of underrepresented groups leveraging methods like regression analysis and propensity score matching
- Identify strategies to support inclusivity, diversity, equity in academic environments

Human AI Teaming

- Enhance human-AI collaboration by enabling healthcare professionals to effectively interact with multi-agent large language models (LLMs) for improved diagnosis, decision-making, and patient care.
- Investigate how LLMs influence scientific discovery across disciplines, identifying their role in question generation, method innovation, and interdisciplinary research.

Data Storytelling

- Apply the word embedding techniques to reveal the constructed emotional dependency of female characters on male characters in books and movies.
- Identify and implement actionable strategies to enhance data storytelling in public libraries, utilizing data visualization tools, and qualitative analysis.

Journal Articles

[1] **Xu, H.**, Lankes, D., Fleischmann, K., & Rieh, S. Y. (2025). Big Data, Bigger Stories? The Journey from Data to Impact in Public Libraries. International Journal of Libraries and Information Studies. (Accepted)

[2] Yang, Y., Zhang, C., **Xu, H.**, Bu, Y., Liu, M., & Ding, Y. (2025). Gender differences in dropout rate: From field, career status, and generation perspectives. Journal of Informetrics,

19(1), 101615.

[3] Yang, Y., Zhang, C., **Xu, H.**, Bu, Y., Liu, M., & Ding, Y. (2024). Unveiling the loss of exceptional women in science. Information Processing & Management, 61(6), 103829.

[4] Yang, A. J., **Xu, H.**, Ding, Y., & Liu, M. (2024). Unveiling the dynamics of team age structure and its impact on scientific innovation. Scientometrics, 1-22.

[5] **Xu, H.**, Liu, M., Bu, Y., Sun, S., Zhang, Y., Zhang, C., ... & Ding, Y. (2024). The impact of heterogeneous shared leadership in scientific teams. Information Processing & Management, 61(1), 103542.

[6] **Xu, H.**, Bu, Y., Liu, M., Zhang, C., Sun, M., Zhang, Y., ... & Ding, Y. (2022). Team power dynamics and team impact: New perspectives on scientific collaboration using career age as a proxy for team power. Journal of the Association for Information Science and Technology, 73(10), 1489-1505.

[7] **Xu, H.**, Zhang, Z., Wu, L., & Wang, C. J. (2019). The Cinderella Complex: Word embeddings reveal gender stereotypes in movies and books. PloS One, 14(11), e0225385.

Conference Articles

[1] **Xu, H.** (2024). Beyond a number game: Flat structures foster minority inclusion in diverse scientific teams. In Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL) 2024, Doctoral Consortium. (Extended Abstract)

[2] **Xu, H.**, Song, M., Saar-Tsechansky M., & Ding, Y. (2023). Using Explainable AI to Understand Team Formation and Team Impact. 86th Annual Meeting of the Association for Information Science and Technology (ASIS&T) 2024. (Long Paper)

[3] Liu, M., **Xu, H.**, Ding, Y., & Bu, Y. (2023) Unpacking team age structure: Temporal evolution and its relation to team impacts. ISSI 2023 - the 19th International Conference of the International Society for Scientometrics and Informetrics. (Long Paper)

[4] **Xu, H.**, … & Ding, Y. (2023). Cross-Team Collaboration and Diversity in the Bridge2AI Project. In Companion Proceedings of the ACM Web Conference 2023 (pp. 790-794). (Short Paper)

[5] **Xu, H.**, … & Ding, Y. (2023). Disparity in the Evolving COVID-19 Collaboration Network. iConference 2023. (Short Paper)

[6] **Xu, H.**, & Erk, K. (2023). Detecting public discourse about COVID-19. iConference 2023. (Poster)

Articles External Review & Major Revision

[1] **Xu, H.,** Strassman, J., Gray, S., & Saar-Tsechansky, M. (2024). Retention at the expense of recognition: The trade-off between retention and citations for junior women in STEM when working with senior collaborators. Science & Nature Family. (External Review)

[2] **Xu, H.,** Liu, H., Leng, Y., & Ding, Y. (2025). Adapting to LLMs: How Insiders and Outsiders Reshape Scientific Knowledge Production. arXiv preprint arXiv:2505.12666. CSCW 2026. (External Review)

[3] **Xu, H.,** Sun, S., Liu, M., Zhang, C., Bu, Y., Zhang, Y., ... & Ding, Y. (2024) Beyond a Number Game: Flat Structures Foster Minority Inclusion in Diverse Scientific Teams. Available at SSRN 4751297. JASIS&T. (Major Revision)

[4] **Xu, H.,** Liu, M., Bu, Y., & Ding, Y. (2024). Empowering the next generation: The role of flat structures in retaining junior researchers. Journal of Informetrics. (Major Revision)

[5] **Xu, H.,** Yi, S., Lim, T., Xu, J., Well, A., Mery, C., ... & Ding, Y. (2025). TAMA: A Human-AI Collaborative Thematic Analysis Framework Using Multi-Agent LLMs for Clinical Interviews. arXiv preprint arXiv:2503.20666. ACM Transactions on Computing for Healthcare. (Major Revision)

Conference Presentations and Talks

- The 10th Annual International Conference on Computational Social Science, July 17–20, 2024, Philadelphia, USA.
- The 11th Academic Symposium. ICPP, Dec 27, 2023, Fudan University, Shanghai, China.
- CZI Open Science Impact Mapping Workshop, October 24-27, 2023, California, USA.
- International Society for Scientometrics and Informetrics (ISSI) Team Science and Innovation workshop, July 2-5, 2023, Bloomington, USA.
- PITT Initiative on Computational Social Science at the University of Pittsburgh, Nov 22, 2022, Pittsburgh, USA.
- 13th Annual International Science of Team Science Conference (SciTS). August 2022, online
- The 6th Annual International Conference on Computational Social Science, July 17–20, 2020, Cambridge, Massachusetts, USA.
- The 5th Annual International Conference on Computational Social Science, July 17–20, 2019, Amsterdam, Netherlands.
- The 4th Annual International Conference on Computational Social Science, July 12–15, 2018, Evanston, Illinois, USA.

Grants & Fellowships

- IMLS-funded LADDER Fellowship   2023.09-2024.05 ($30,000)
- Graduate Student Professional Development Travel Grants   2024 ($1,000)
- International Conference on Computational Social Science Travel Grants   2018 ($1000)

Teaching experience

- Programming to Informatics, 2025 (Instructor)
- Introduction to Informatics, 2025 (Lecturer, Leading Discussion Seminars)
- Database Management, 2024 (Teaching Assistant, Leading Prompt Engineering and LLM's With LangChain)
- Perspectives on Information, 2024 (Teaching Assistant, Leading Workshop)
- AI literacy, Navarro High School, 2023 (Lecturer)

Service

- Peer Reviewer: Information Processing & Management | JASIS&T | Humanities and Social Sciences Communications | Scientometrics | Quality & Quantity | iconference | asis&t | ic2s2
- UT Information School Colloquium Committee Member
- UT Student Ambassador in Global Professional Training East and Southeast Asia
- Science of Team Science 2025 INSciTS Program Committee Member
- Team Science Training Inventory Seminar Organizer in ACTS Team Science Professionals SIG