

Juliana (Juli) Hirt

PhD Candidate, Information Science • University of Wisconsin–Milwaukee

Milwaukee, WI • jhirt@uwm.edu • +1 (414) 484-8592 • julihirt.com • linkedin.com/in/data-first-mke

Professional Appointments

Graduate Research Assistant, University of Wisconsin–Milwaukee 2022–Present

Conducted qualitative and quantitative research in information science, including survey design, data collection, modeling, and analysis.

Senior Data Engineer, West Bend Mutual Insurance 2024

Designed and implemented cost-conscious ingestion pipelines for centralized enterprise data stores. Mentored associates in distributed computing paradigms and CI/CD practices.

Senior Analytics Engineer, Northwestern Mutual 2021–2024

Designed and developed data science pipelines for compliance monitoring. Led migration of analytical workflows from on-premise infrastructure to cloud-based platforms.

Insight Engineering Team Lead, Crisis Prevention Institute 2020–2021

Developed enterprise-wide data consumption and reporting platforms. Supported marketing analytics through consolidated customer profiling and data integration.

Teaching Experience

Adjunct Instructor, University of Wisconsin–Milwaukee 2019–2022

INFOST 410 — Database Information Retrieval Systems

INFOST 310 — Human Factors in Information Seeking and Use

INFOST 495 — Information Internship

Publications

Peer-reviewed journal articles

Cho, H., Lee, W.-C., Thach, H., & **Hirt, J.** (2025). Evaluating video game moods and their separability based on user-generated reviews. *Journal of Documentation*, 81(2), 545–565. <https://doi.org/10.1108/JD-10-2024-0247>

Lee, W.-C., Huang, L.-M.C., & **Hirt, J.** (2025). Embracing emojis: Prototyping mood-enhanced information systems for fiction readers. *Journal of Documentation*, 81(2), 313–329. <https://doi.org/10.1108/JD-05-2024-0100>

Lee, W.-C., Huang, L.-M.C., & **Hirt, J.** (2024). From amused to 😄: Enriching mood metadata by mapping textual descriptors to emojis for fiction reading. *Journal of Documentation*, 80(2), 552–571. <https://doi.org/10.1108/JD-08-2023-0146>

Peer-reviewed conference proceedings

[Accepted] **Hirt, J.** & Lee, W.-C. (2026). From signals to structure: Enriching event metadata for optimized data ingestion. *ISKO 2026*.

Hirt, J. & Lee, W.-C. (2025). Adventurers and algorithms: AI and the evolution of TTRPG gameplay. In *Proceedings of the Annual Conference of the Canadian Association for Information Science / Actes du congrès annuel de l'ACSI*. <https://doi.org/10.29173/cais1888>

Lee, W.-C., **Hirt, J.**, & Cho, H. (2024). From fandom to fadeaway: Unpacking factors contributing to anime dropout. *Proceedings of the Association for Information Science and Technology*, 61, 989–991.

<https://doi.org/10.1002/pra2.1163>

Professional publications (non peer-reviewed)

Babou, T., Capece, J., Gideon, U., **Hirt, J.**, Le, J., Tamanna, T., Yang, H., Youn, S., & Yu, X. (2026). *A kinetic Monte Carlo (kMC) model for the dynamics of infectious diseases*. SIAM Graduate Student Mathematical Modeling Camp.

Lee, W.-C., **Hirt, J.**, & Luo, M. (2025). *Ethical AI and Librarianship: A Resource Guide*.

<https://sites.uwm.edu/ethical-ai-lib>

Data Sets & Software

Babou, T., Capece, J., Gideon, U., **Hirt, J.**, Le, J., Tamanna, T., Yang, H., Youn, S., & Yu, X. (2026). Software for kinetic Monte Carlo (kMC) simulation for modeling coronavirus spread (v1.0.0) [Computer software]. Zenodo.

<https://doi.org/10.5281/zenodo.20659487>

Hirt, J.(2026). FAIR-Checker API integration pipeline [Computer software]. Zenodo.

<https://doi.org/10.5281/zenodo.18734665>

Lee, W.-C., Huang, L.-M., & **Hirt, J.**(2023). Emojis and emotion categories for fiction. [Data set]. https://dc.uwm.edu/sois_facpubs/21

Presentations

Peer-reviewed conference posters

[Accepted] **Hirt, J.**, Lee, W.-C., & Gottesman, A. (2026). Myth, magic, and machine learning: Ethical inquiry into AI-assisted tabletop roleplaying games. ALISE 2026 Annual Conference, Buffalo, NY, United States.

Lee, W.-C., **Hirt, J.**, & Cho, H. (2025). AI-assisted creativity: Shaping reader perspectives and evolving information needs. iConference, Indianapolis, Indiana. <https://hdl.handle.net/2142/126214>

Lee, W.-C., **Hirt, J.**, & Cho, H. (2024). From fandom to fadeaway: Unpacking factors contributing to anime dropout. Association for Information Science and Technology (ASIS&T) Annual Conference, Calgary, Alberta.

Non Peer-reviewed conference posters

Babou, T., Capece, J., Gideon, U., **Hirt, J.**, Le, J., Tamanna, T., Yang, H., Youn, S., & Yu, X. (2026). A kinetic Monte Carlo (kMC) model for the dynamics of infectious diseases. SIAM Graduate Student Mathematical Modeling Camp, University of Delaware.

Lee, W.-C., **Hirt, J.**, & Luo, M. (2026). Cultivating AI literacy in libraries: A resource guide for librarians and users. American Library Association Annual Conference.

Lee, W.-C., **Hirt, J.**, & Adebayo, J. O. (2024). Unveiling ethical concerns in AI: Early insights from a systematic review. AI Ethics Symposium: From Policy to Practice (NMDSI Symposium), Milwaukee, Wisconsin.

Conference talks

Hirt, J. & Lee, W.-C. (2025). Adventurers and algorithms: AI and the evolution of TTRPG gameplay. Canadian Association for Information Science Conference, Halifax, Nova Scotia.

Lee, W.-C., **Hirt, J.**, & Cho, H. (2025). AI-assisted creativity: Shaping reader perspectives and evolving information needs. iConference, Indianapolis, Indiana.

Awards

Society for Industrial and Applied Mathematics (SIAM), Mathematical Problems in Industry (MPI), 2026.

Society for Industrial and Applied Mathematics (SIAM), Graduate Student Mathematical Modeling Camp (GSMMC), 2026.

Graduate Student Excellence Fellowship (GSEF), University of Wisconsin–Milwaukee. 2026–2027.

2026 NMDSI SDSS Student Scholarship

Graduate Student Excellence Fellowship (GSEF), University of Wisconsin–Milwaukee. 2025–2026.

Grants

Northwestern Mutual Data Science Institute (NMDSI). Project Lead. *Dungeons, dragons, and data: AI ethics in the realm of tabletop roleplaying*. Summer 2025.

American Library Association (ALA). Contributor. *Ethical AI and librarianship: A resource guide*. 2024.

Northwestern Mutual Data Science Institute (NMDSI). Contributor. *Ethical AI: Challenges and opportunities*. Fall 2024.

Service

Mathematical Association of America (MAA) — Member

MAA SIGMAA-REC — Member

UW-M Digital Cultures Collaboratory (DCC) — Member, Public Communications Director, Symposium Chair

UW-M Knowledge Organization Research Group in Information Studies (KORGIS) — Member, Website Coordinator

Association for Women in Mathematics (AWM) — Member, Website Coordinator

UW-M SIAM Chapter — Member