PhD Student · Milwaukee, Wisconsin · juliana@hirt-tech.com · +1 414 484 8592

Juliana Hirt | Resume

❯ Status:	PhD Student, Researcher, Senior Analytics Engineer
❯ Fields:	Distributed Data Engineering, Cloud Infrastructure
❯ Stack:	Python, SQL, Spark, Distributed Computing, LaTeX
❯ Tools:	Git, Visual Studio Code, Databricks, Azure, AWS
❯ Activities:	Hockey, Table Top Games, Video Games, Swimming

EXPERIENCE

Senior Data Engineer (West Bend Mutual Insurance) — 2024 - 2024
- ❯ Designed and developed a cost-conscious ingestion process for centralized data stores
- ❯ Mentored associates in distributed computing paradigms and CI/CD practices

Senior Analytics Engineer (Northwestern Mutual) — 2021 - 2024
- ❯ Responsible for the design and development of data science pipelines for compliance monitoring
- ❯ Facilitated data pipeline migration from on-premise hardware to the cloud

Graduate Research Assistant (University of Wisconsin-Milwaukee) — 2022 - Now
- ❯ Assisted with survey instrument design and data collection
- ❯ Responsible for model creation and data analysis

Adjunct Professor (University of Wisconsin-Milwaukee) — 2019 - 2022
- ❯ Lead students through an experiential course in data management and information retrieval
- ❯ Mentored new IT professionals through independent projects and internships

Insight Engineering - Team Lead (Crisis Prevention Institute) — 2020-2021
- ❯ Developed an enterprise-wide data consumption and reporting platform
- ❯ Upscaled marketing campaigns through the creation of consolidated customer profiles

Check out my LinkedIn - **linkedin.com/in/data-first-mke**

EDUCATION

PhD Student - Information Science (University of Wisconsin - Milwaukee) — 2022 - Now
- ❯ Focused on the development of a data profiling algorithm for distributed compute environments
- ❯ Assisting in research focused on the strategic description and organization of fiction books

Master's - Information Science (University of Wisconsin - Milwaukee) — 2016-2018
- ❯ Masters Thesis: A novel application of NLP for library chat systems
- ❯ Supported undergraduate students as a teaching assistant

Bachelor's - Mathematics (University of Wisconsin - Milwaukee) — 2008-2016
- ❯ Bachelors Thesis: The application of numerical analysis to detect failure points in eSports matches
- ❯ Focused on applications of mathematical modeling and game theory in Python

Certifications (Independent) — 2020-2021
- ❯ Azure AI Fundamentals, Azure Fundamentals, Azure Data Fundamentals
- ❯ MTA: Database Fundamentals, Marketo Engage Business Practitioner

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PUBLICATIONS

Journal Articles

❯ 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

❯ Lee, W.-C., Huang, L.-M.C. & Hirt, J. (2024), Embracing emojis: prototyping mood enhanced information systems for fiction readers, Journal of Documentation, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JD-05-2024-0100

Posters

❯ 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

❯ Lee, W.-C., Hirt, J. & Adebayo, J. (2024), Unveiling Ethical Concerns in AI: Early Insights from a Systematic Review. NMDSI AI Ethics Symposium: From Policy to Practice.

❯ Lee, W.-C., Hirt, J. & Cho, H. (2025), AI-assisted Creativity: Shaping Reader Perspectives and Evolving Information Needs.

Data Sets

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

GRANT-FUNDED RESEARCH

Contributions

❯ Ethical AI and Librarianship: A Resource Guide. Funded by American Library Association (ALA) Carnegie-Whitney Grant (2024) (August 1, 2024 – July 31, 2025)

❯ Ethical AI: Challenges and Opportunities. Funded by Northwestern Mutual Data Science Institute (NMDSI) Student Research Scholars Program Award (July – December, 2024)

TEACHING

Courses

❯ INFOST 410 - Database Information Retrieval Systems
❯ INFOST 310 - Human Factros in Information Seeking and Use