

# ESHTA BHARDWAJ

[Email](#) · [LinkedIn](#) · [Personal Website](#) · [Google Scholar](#)

Researcher and [PhD Candidate](#) studying data practices in machine learning from a data curation lens. Research interests include examining concerns of fairness, accountability, and transparency in ML dataset development, developing methods to promote reflexivity in data work, and designing data curation interventions for ML.

## EDUCATION

<b>PhD</b>	University of Toronto, Information Supervisor: <a href="#">Christoph Becker</a>	Sep 2022 – Present
<b>MA</b>	York University, Information Systems and Technology Thesis: “Data Analytics in Climate Change Studies” Supervisor: <a href="#">Peter Khaiteer</a>	May 2022
<b>BA</b>	York University, Information Technology Specialized Honours	May 2020

## HONORS AND AWARDS

<b>Ontario Graduate Scholarship</b>	2025 – 2026
<ul style="list-style-type: none"><li>▪ Merit-based provincial award granted on the basis of academic experience and achievements and clarity and significance of submitted research proposal.</li><li>▪ Amount awarded: \$15,000.</li></ul>	
<b>Faculty of Information Excellence Award</b>	2025 – 2026
<ul style="list-style-type: none"><li>▪ Merit-based award granted in recognition of achieving an external, competitive award.</li><li>▪ Amount awarded: \$5000.</li></ul>	
<b>Women in Machine Learning (WiML) Travel Award</b>	2024
<ul style="list-style-type: none"><li>▪ Competitive travel award to attend and present at the Women in Machine Learning workshop.</li><li>▪ Amount awarded: \$700.</li></ul>	
<b>NeurIPS 2024 Scholar Award</b>	2024
<ul style="list-style-type: none"><li>▪ Competitive travel award to attend and present at the Conference on Neural Information Processing Systems, a leading global venue for AI/ML research.</li><li>▪ Amount awarded: \$2400.</li></ul>	
<b>SGS PhD Research and Conference Travel Award</b>	2024
<ul style="list-style-type: none"><li>▪ Travel award to attend and present at Conference on Fairness, Accountability, and Transparency.</li><li>▪ Amount awarded: \$3000.</li></ul>	
<b>CapaCITY/É Summer Institute</b>	2024
<ul style="list-style-type: none"><li>▪ Competitive travel award to attend the CapaCITY/É project’s first training institute on implementation science for sustainability initiatives through interdisciplinary collaboration.</li><li>▪ Amount awarded: \$900.</li></ul>	
<b>WDS-ITO Student Travel Award for Research Data Alliance Plenary</b>	2023
<ul style="list-style-type: none"><li>▪ <a href="#">Competitive travel award</a> granted to attend the Research Data Alliance <a href="#">20<sup>th</sup> Plenary Meeting</a> to learn research data management (RDM) practices and infrastructure, interoperability, and data stewardship and advance its usage within ML research.</li><li>▪ Amount awarded: \$5000.</li></ul>	
<b>Digital Curation Institute (DCI) Fellowship</b>	2022 – 2023
<ul style="list-style-type: none"><li>▪ The <a href="#">DCI Fellowship</a> offers students and researchers the ability to lead research at the intersection of sustainability, computing and technology, and curation activities. As part of the DCI, I have been part of establishing a baseline platform for data curation and modelling for <a href="#">Curbcut Toronto</a>.</li><li>▪ Amount awarded: \$5000.</li></ul>	

## PEER REVIEWED PUBLICATIONS

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### *Conference Papers*

1. Guliyeva, N., **Bhardwaj, E.**, & Becker, C. Exploring the Viability of the Updated World3 Model for Examining the Impact of Computing on Planetary Boundaries. In Proceedings of the 2025 Workshop on Computing within Limits. **LIMITS**. [URL](#).
2. **Bhardwaj, E.**, Gujral, H., Wu, S., Zogheib, C., Maharaj, T., & Becker, C. The State of Data Curation at NeurIPS (2024). An Assessment of Dataset Development Practices in the Datasets and Benchmarks Track. In Advances in Neural Information Processing Systems Datasets and Benchmarks Track (**Spotlight Poster - NeurIPS D&B**). [DOI](#).
3. **Bhardwaj, E.**, Qiao, H., & Becker, C. (2024). Limits at a Distance: Design Directions to Address Psychological Distance in Policy Decisions Affecting Planetary Boundaries. In Proceedings of the 2024 Workshop on Computing within Limits. **LIMITS**. [DOI](#).
4. **Bhardwaj, E.**, Gujral, H., Wu, S., Zogheib, C., Maharaj, T., & Becker, C. (2024). Machine learning data practices through a data curation lens: An evaluation framework. In The 2024 ACM Conference on Fairness, Accountability, and Transparency (**FAccT**), 1055-1067. [DOI](#).
5. **Bhardwaj, E.\***, Qiao, H.\*, & Becker, C. (2023). Pathways to urban sustainability: Design perspectives on a data curation and visualization platform. In Proceedings of the 2023 Workshop on Computing within Limits. **LIMITS**. [DOI](#). (\*equal contribution)

### *Journal Papers*

1. **Bhardwaj, E.**, & Khaiter, P. (2023). Is the climate getting WARMer? A framework and tool for climate data comparison. Environmental Modelling & Software, 171, Article 105879. [DOI](#).
2. **Bhardwaj, E.**, & Khaiter, P. (2022). What data analytics can or cannot do for climate change studies: An inventory of interactive visual tools. Ecological Informatics, Article 101918. [DOI](#).

## WORKSHOPS

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### *Organizer*

1. Bhardwaj, E. & Becker, C. Leveraging humour, satire, and art to engage with the environmental impacts of AI. ACM Conference on Fairness, Accountability, and Transparency (FAccT), CRAFT Workshop, 2025.
2. Bhardwaj, E., Qiao, H., Munson, R., & Becker, C. Humour as Resistance: Creative Approaches to Data Center Accountability. ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies, Workshop, 2025.
3. Qiao, H., Bhardwaj, E., ... & Becker, C. Are You Thirsty? So is Your AI. ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies, Arts & Demos, 2025.

### *Peer-reviewed submissions*

1. Qiao, H., Bhardwaj, E., ... & Becker, C. Are You Thirsty? So is Your AI. Responsible AI Day at KDD, 2025. [Abstract submission and paper presentation]
2. Bhardwaj, E. & Becker, C. Supporting Responsible Machine Learning by Improving Data Curation. 19th Women in Machine Learning Workshop (WiML) at NeurIPS, 2024. [Abstract and poster presentation]
3. Bhardwaj, E. & Qiao, H. Pathways to urban sustainability: Design perspectives on a Toronto-based data curation and visualization platform. Beatrice and Arthur Minden Symposium on the Environment, 2024. [Poster presentation]
4. Bhardwaj, E. Data Practices in Decision-Making for Environmental Sustainability. Computer-Supported Cooperative Work (CSCW) workshop on Data-Enabled Sustainability, 2023. [Abstract submission]

5. Bhardwaj, E. Data Curation for Community Empowerment in Machine Learning Research. Computer-Supported Cooperative Work (CSCW) workshop on Community-Driven AI, 2023. [Abstract submission]
6. Bhardwaj, E. & Khaiteer, P. Visualization tools for climate data analytics. In 2022 International Congress on Environmental Modelling and Software and Science Based Decision Making. [Abstract submission]
7. Bhardwaj, E. & Khaiteer, P. Data Analytics Approach to Climate Change Studies. In 2021 International Congress on Modelling and Simulation. [Abstract submission and oral presentation]

#### **OTHER SERVICE & MISC.**

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Affiliate, Toronto Climate Observatory	2023 – Present
Member, FAIR for Machine Learning (FAIR4ML) IG	2023 – Present
Member, Just Sustainability Design Lab	2022 – Present
Reviewer, Journal of Environmental Modelling & Software	2024
Reviewer, Women in Machine Learning Workshop (WiML) at NeurIPS	2024
Reviewer, International Conference on ICT for Sustainability	2023

#### **RESEARCH EXPERIENCE**

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<b>Thesis</b> , York University	2022
<ul style="list-style-type: none"> <li>▪ Successfully defended <a href="#">master's thesis</a> on data analytics in climate change studies with a focus on developing a data analysis framework and visualization tool for climatic analysis on a regional scale to compare climate models with the corresponding observed values. Nominated for the annual Thesis Prize.</li> </ul>	

#### **TEACHING EXPERIENCE**

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<b>University of Toronto</b>	
<b>Course Instructor: Data Visualization</b> , Data Science Certificate for Doctoral Students	2025
<b>Teaching Assistant</b> , Faculty of Information	Jan 2023 – Present
<ul style="list-style-type: none"> <li>▪ INF1003: Information Systems, Service and Design (graduate)</li> <li>▪ INF1339: Introduction to Computational Thinking (graduate)</li> <li>▪ INF1342: System Requirements and Architectural Design (graduate)</li> <li>▪ INF2040: Project Management (graduate)</li> <li>▪ INF2169: User-Centered Information Systems Development (graduate)</li> </ul>	
<b>York University</b>	Sep 2020 – Apr 2022
<b>Teaching Assistant</b> , Information Technology	
<ul style="list-style-type: none"> <li>▪ ITEC 1000: Introduction to Information Technologies (undergraduate)</li> <li>▪ ITEC 1010: Information and Organizations (undergraduate)</li> </ul>	