Madeleine Grunde-McLaughlin

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Education

2021-present | **Ph.D. Student at the University of Washington,** *Seattle, WA.*
Paul G. Allen School of Computer Science & Engineering
Co-advised by Jeffrey Heer and Daniel Weld

2016-2021 | **B.A. at the University of Pennsylvania,** *Philadelphia, PA.*
Bachelor of Arts in Cognitive Science with Summa Cum Laude
Minors in Computer Science, French

2019 | **Community Auditing Program at Princeton University,** *Princeton, NJ.*
Audited Computer Vision, NLP, Advanced Graph Theory (not for credit)

2019 | **Study Abroad at Lyon Lumière II,** *Lyon, France.*
Courses in French including Neuroscience, Human Computer Interaction, and Memory

Publications

TOCHI 2025 | **Designing LLM Chains by Adapting Techniques from Crowdsourcing Workflows**
***Madeleine Grunde-McLaughlin**, Michelle S Lam, Ranjay Krishna, Daniel S Weld, Jeffrey Heer*
ACM Transactions on Computer-Human Interaction

TOCHI 2025 | **Wildfire and Forest Management: Opportunities for HCI Research**
*Nino Migineishvili, **Madeleine Grunde-McLaughlin**, Emmanuel Azuh, Spencer A Wood, Rene Just, Katharina Reinecke*
ACM Transactions on Computer-Human Interaction

COLM 2025 | **Visual Representations inside the Language Model**
Benlin Liu, Amita Kamath, Madeleine Grunde-McLaughlin, Winson Han, Ranjay Krishna
Conference on Language Modeling

CHI 2024 | **How Do Data Analysts Respond to AI Assistance? A Wizard-of-Oz Study**
*Ken Gu, **Madeleine Grunde-McLaughlin**, Andrew M McNutt, Jeffrey Heer, Tim Althoff*
ACM Conference on Human Computer Interaction, 2024

CSCW 2023 | **Explanations can Reduce Overreliance on AI Systems during Decision-Making**
*Helena Vasconcelos, Matthew Jörke, **Madeleine Grunde-McLaughlin**, Ranjay Krishna, Tobias Gerstenberg, and Michael Bernstein*
ACM Conference on Computer-Supported Cooperative Work and Social Computing, 2023

CVPR 2022 | **AGQA-Decomp: Measuring Compositional Consistency for Video Question Answering**
*Mona Gandhi, Mustafa Öümer Gul, Eva Prakash, **Madeleine Grunde-McLaughlin**, Ranjay Krishna, Maneesh Agrawala*
IEEE conference on Computer Vision and Pattern Recognition, 2022

CVPR 2021 | **AGQA: A Benchmark for Compositional Spatio-Temporal Reasoning**
***Madeleine Grunde-McLaughlin**, Ranjay Krishna, Maneesh Agrawala*
IEEE conference on Computer Vision and Pattern Recognition, 2021

InfoVis 2020 | **Bayesian-Assisted Inference from Visualized Data**
*Yea-Seul Kim, Paula Kayongo, **Madeleine Grunde-McLaughlin**, Jessica Hullman*
IEEE Transactions of Visualization & Computer Graphics (Proceedings of InfoVis), 2020

Preprints and workshop papers

IUI 2026 | **RDoFlow: Automatically assessing under-specified statistical analyses in HCI**
***Madeleine Grunde-McLaughlin**, Weixuan Liu, Ria Patil, Nino Migineishvili, Emily Reif, Ranjay Krishna, Daniel S. Weld, Jeffrey Heer*
Conditional Acceptance at the ACM Conference on Intelligent User Interfaces

ArXiv 2025 | **Magentic-ui: Towards human-in-the-loop agentic systems**
*Hussein Mozannar, Gagan Bansal, Cheng Tan, Adam Fourney, Victor Dibia, Jingya Chen, Jack Gerrits, Tyler Payne, Matheus Kunzler Maldaner, **Madeleine Grunde-McLaughlin**, Eric Zhu, Griffin Bassman, Jacob Alber, Peter Chang, Ricky Loynd, Friederike Niedtner, Ece Kamar, Maya Murad, Rafah Hosn, Saleema Amershi*
ArXiv, July 2025

NAACL 2025 | **Towards AI-assisted academic writing**
*Daniel J Liebling, Malcolm Kane, **Madeleine Grunde-Mclaughlin**, Ian Lang, Subhashini Venugopalan, Michael Brenner*
Nations of the Americas chapter of the Association for Computational Linguistics, Workshop on AI and Scientific Discovery

CSCW 2023 | **Semantic Navigator: Query Driven Active Learning for Historical Narrative Understanding**
*Eva Maxfield Brown, **Madeleine Grunde-McLaughlin**, Isabelle Pestovski, Lanyi Zhu, Nicholas Weber*
ACM Conference on Computer-Supported Cooperative Work and Social Computing, Community-Driven AI Workshop, 2023

CHI 2022 | **When Do XAI Methods Work? A Cost-Benefit Approach to Human-AI Collaboration**
*Helena Vasconcelos, Matthew Jörke, **Madeleine Grunde-McLaughlin**, Ranjay Krishna, Tobias Gerstenberg, and Michael Bernstein*
ACM Conference on Human Computer Interaction, TRAIT Workshop, 2022

ArXiv 2022 | **AGQA 2.0: An updated benchmark for compositional spatio-temporal reasoning**
***Madeleine Grunde-McLaughlin**, Ranjay Krishna, Maneesh Agrawala*
ArXiv, April 2022

ArXiv 2021 | **Model comparison of the effects of stimulus structure on visual working memory recall**
***Madeleine Grunde-McLaughlin**, Cheng Qiu, Alan A Stocker*
Undergraduate Honors Thesis, April 2021

Selected Awards and Honors

2023 | **CSCW Best Paper Honorable Mention,** *awarded to top 23 papers*
"Explanations can Reduce Overreliance on AI Systems during Decision-Making"

2021 | **Allen School Computer Science & Engineering Research Fellowship**
1-year fellowship from the University of Washington Allen School

2021 | **College Alumni Society Prize in Cognitive Science**
Awarded to the best Cognitive Science thesis at the University of Pennsylvania

2021 | **Phi Beta Kappa Honor Society**

Academic Service

2024-present
DUB (Design Use Build) Coordinator, *University of Washington*
- Recruiting, training, and supporting speaker hosts for DUB seminar.
- Recruiting, training, and supporting DUB Doctoral Colloquium Coordinators.
- Co-coordinating DUB Community Day and DUB Research Day as Session Chair Organizer.

2025-present
Diverse Genders in Research Student Coordinator, *University of Washington*
- Organizing community-building lunches and external events.

2025-present
2022-2023
New Grad Mentor, *University of Washington*
- Supporting first year students as they adapt to the PhD program.

2025
Pre-Application Mentoring Service, *University of Washington*
- Mentored four PhD applicants in the application process.
- Reviewed Statements of Purpose and CVs for multiple editing iterations.

2023-2025
New Grad Mentoring Organizer, *University of Washington*
- Coordinated and matched first-year and older student pairs.
- Organized quarterly events for all mentors and mentees.

2024
Inaugural para.chi.dub Session Chair Organizer, *University of Washington*
- Defined session chair responsibilities.
- Coordinated and instructed 3 other session chairs and 15 presenters.
- Moderated a panel and introduced speakers and sessions.

2024
Visit Days Non-Standard Visitor Coordinator, *University of Washington*
- Organized the schedule and meetings for prospective students visiting at non-standard times.

2023
Visit Days PCS Area HCI Lead Scheduler-in-Chief, *University of Washington*
- Coordinated prospective students visit days scheduling categories.

2023-2024
HCI Seminar Organizer, *University of Washington*
- Coordinated weekly speakers for seminar presentations.

2022-2023
Doctoral Colloquium Coordinator for DUB (Design Use Build), *University of Washington*
- Organized a workshop for Ph.D. students to get feedback on their dissertation plan.
- Recruited 6 panelists across industry and academia.
- Coordinated and ran a full-day event in which students present their research and faculty give feedback.

2022-present
Conference Reviewer
- Conferences: IUI 2025, CHI 2025, UIST 2025, CHI 2024, UIST 2024, VIS VDS 2024, CSCW 2023, TiiS 2022, UIST 2022
- Workshops: CHI 2024 Late-Breaking Work, ECCV 2024, TREW 2024, TRAIT 2023, TRAIT 2022

Teaching and Mentoring

2025
Mentoring Two undergraduate researchers taking CSE494

2024-2025
Mentoring Weixuan Liu (undergrad) and Ria Patil (undergrad)

2021-2022
Mentoring Mona Gandhi (undergrad), Mustafa Omer Gul (masters), and Eva Prakash (undergrad)

2024, 2025
CSE 442 Data Visualization Teaching Assistant, *Professor Jeffrey Heer*

2024
CSE 512 Data Visualization Teaching Assistant, *Professor Jeffrey Heer*

Industry research experience

2025 | **Microsoft Research Intern** *Redmond, Washington*
AI Frontiers Group, mentored by Adam Fourney and Saleema Amershi

2023 | **Google Student Researcher** *Seattle, Washington*
Google Applied Sciences Group, mentored by Dan Liebling

Technical Skills

Advanced - Python; Proficient - Pytorch, Tensorflow, HTML/CSS, D3, Flask, Java; Basic - R, React, Idyll