# Madeleine Grunde-McLaughlin

## **EDUCATION**

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

B.A. at the University of Pennsylvania, Philadelphia, PA.

Bachelor of Arts in Cognitive Science with Summa Cum Laude
Minors in Computer Science, French

Community Auditing Program at Princeton University, Princeton, NJ.

Audited Computer Vision, NLP, Advanced Graph Theory (not for credit)

Study Abroad at Lyon Lumière II, Lyon, France.

Courses in French including Neuroscience, Human Computer Interaction, and Memory

## **PUBLICATIONS**

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
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
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

Designing LLM Chains by Adapting Techniques from Crowdsourcing Workflows 2023 Madeleine Grunde-McLaughlin, Michelle S Lam, Ranjay Krishna, Daniel S Weld, Jeffrey Heer ArXiv preprint, December 2023 Semantic Navigator: Query Driven Active Learning for Historical Narrative Understanding CSCW 2023 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 AGQA 2.0: An updated benchmark for compositional spatio-temporal reasoning 2022 Madeleine Grunde-McLaughlin, Ranjay Krishna, Maneesh Agrawala ArXiv, April 2022 Model comparison of the effects of stimulus structure on visual working memory recall 2021 Madeleine Grunde-McLaughlin, Cheng Qiu, Alan A Stocker Undergraduate Honors Thesis, April 2021

#### **PRESENTATIONS**

**Benchmarks for Vision-Language Compositional Reasoning** 2023 Madeleine Grunde-McLaughlin, Cheng-Yu Hsieh Talk, IEEE/CVF International Conference on Computer Vision (ICCV), CAMP Workshop, 2023 Applying social computing workflows for text-editing with LLMs 2023 Madeleine Grunde-McLaughlin, Michelle Lam, Ranjay Krishna, Jeffrey Heer, Daniel Weld Poster, CRA-WP Grad Cohort for Women Conference AGQA: A Benchmark for Compositional Spatio-Temporal Reasoning 2021 Madeleine Grunde-McLaughlin, Ranjay Krishna, Maneesh Agrawala Poster, Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, 2021 Measuring Spatio-Temporal Reasoning Through VideoQA 2020 Madeleine Grunde-McLaughlin, Ranjay Krishna, Maneesh Agrawala Poster, Grace Hopper Celebration of Women in Computing

#### SELECTED AWARDS AND HONORS

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

## WORK EXPERIENCE

2023 Google Student Researcher Seattle, Washington

• Explored reference validation with the Google Applied Science group

2018 | Aravind Eye Care Systems Project Student, Madurai, India

- Implemented a Moodle Learning Management System to track training completion for doctors and nurses
- Led a focus group with 8 doctors to test the Learning Management System interface
- · Liaised between 5 departments to design the goals and implementation of this project

2017 Dynamix Gymnastics Assistant Camp Director, Langhorne, Pennsylvania

- Managed a team of 11 coaches of various experience levels
- · Communicated goals and mediated interpersonal conflicts among coaches, parents, and children

#### **SERVICE**

#### 2023-present | New Grad Mentoring Organizer, University of Washington

- Coordinating and matching first-year and older studient pairs
- Organizing quarterly events for all mentors and mentees

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 academica
- Coordinated and ran a full-day event in which students present their research and faculty give feedback

2022-2023 New Grad Mentor, University of Washington

- · Organizing events for new students to build community
- Supporting first year students as they adapt to the PhD program

2017-2021 | **Penn for Refugee Empowerment**, *University of Pennsylvania* 

- Served as Vice President and Director of Tutoring
- Co-founded tutoring program that now connects 50+ volunteers to tutor refugees in Philadelphia and abroad
- Re-structured the organization's focus to increase tutoring numbers by over 300% in one semester
- · Participated in the UN TOGETHER Campaign to promote university student led refugee aid organizations
- Tutored high school students at the African Family and Health Organization (AFAHO) in West Philadelphia

2018-2021 | Alpha Phi Omega Service Fraternity, University of Pennsylvania

- Served as Pledge Service Chair and on the Leadership Committee
- Volunteered at various service events in Philadelphia such as UCHC soup kitchens and Books Through Bars
- Led a service committee that collaborated with an event cleaning streets in North Philadelphia

## TECHNICAL SKILLS

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