Anna Martin-Boyle

Ph.D. Candidate in Computer Science, GroupLens at UMN

Computer Science & Engineering
University of Minnesota - Twin Cities
(408) 677-9951
mart5877@umn.edu
https://anmartin94.github.io/

EDUCATION

---

08 / 2022 -
present

University of Minnesota - Twin Cities. Minneapolis, MN
   Ph.D. in Computer Science
      Advisor: Harmanpreet Kaur

08 / 2020 -
05 / 2022

University of Minnesota - Duluth. Duluth, MN
   M.S. in Computer Science
      Thesis: Extracting Task Descriptions from Shared Task Overview Papers
      Advisor: Ted Pedersen

01 / 2017 -
05 / 2020

Northern Michigan University. Marquette, MI
   B.S. in Computer Science, Minor in Mathematics. Summa cum laude
      Advisor: John Sarkela

EMPLOYMENT

---

08 / 2025 -
12 / 2025

University of Minnesota. Minneapolis, MN
   Teaching Assistant
      Supervisor/Instructor: Phillip Barry
      Course: *Computing and AI Ethics*

05 / 2025 -
08 / 2025

University of Minnesota. Minneapolis, MN
   Research Assistant
      Supervisor: Harmanpreet Kaur

06 / 2024 -
08 / 2025

NASA Langley Research Center. Hampton, VA
   Research Intern, Funded by the Langley Transformation Initiative
      Supervisors: Cara Leckey and Martha Brown

05 / 2023 - **University of Minnesota.** Minneapolis, MN
08 / 2023   Research Assistant
        Supervisor: Dongyeop Kang

05 / 2022 - **University of Minnesota**. Minneapolis, MN
08 / 2022   Research Assistant
        Supervisor: Dongyeop Kang

08 / 2020 - **University of Minnesota**. Duluth, MN
05 / 2022   Teaching Assistant

Course:	Instructor:
Computer Ethics	*Ted Pedersen*
Software Analysis & Design	*Tim Colburn*
Computer Architecture	*Ted Pedersen*
Natural Language Processing	*Ted Pedersen*
Computer Science II	*Steve Holtz*

05 / 2019 - **Datastax.** Santa Clara, CA
08 / 2019   Software Engineering Intern
        Manager: Chandra Danam; Supervisor: Zach Kurey

RESEARCH

Under Review

Martin-Boyle, Anna, William Humphreys Jr., Martha C. Brown, Cara Campbell-Leckey, & Harmanpreet Kaur. 2025. "An Expert Schema for Evaluating Large Language Model Errors in Scholarly Question-Answering Systems." [*Under Review at CHI 2026*]

Martin-Boyle, Anna, Martha C. Brown, Cara Campbell-Leckey, & Harmanpreet Kaur. 2025. "A Claim-Evidence Interface for Grounding Provenance in LLM-based Scholarly Q&A." [*Under Review at CHI 2026*]

Workshops & Posters

Martin-Boyle, Anna, Aahan Tyagi, Marti Hearst, & Dongyeop Kang. 2024.

"Knowledge Synthesis is Shallow in GPT-Generated Texts: A Case Study in Automatic Related Work Composition." Presented at the CRA-WP Grad Cohort for Women Workshop. April 12th, 2024.

Koo, Ryan, **Anna Martin-Boyle**, Linghe Wang, & Dongyeop Kang. 2023. "Decoding the End-to-end Writing Process in Scholarly Manuscript via Writer-action Taxonomy." Presented at the [2nd In2Writing Workshop](#) at CHI. April 23, 2023. https://arxiv.org/abs/2304.00121.

Martin, Anna, Ted Pedersen, & Jennifer D'Souza. 2022. "NLPSharedTasks: A Corpus of Shared Task Overview Papers in Natural Language Processing Domains." In *Proceedings of the first Workshop on Information Extraction from Scientific Publications,* pages 105-120, Online. Association for Computational Linguistics. https://aclanthology.org/2022.wiesp-1.13/.

Martin, Anna & Ted Pedersen. 2021. "Duluth at SemEval-2021 Task 11: Applying DeBERTa to Contributing Sentence Selection and Dependency Parsing for Entity Extraction." In *Proceedings of the Fifteenth Workshop on Semantic Evaluation,* pages 490-501, Bangkok (online). August 5-6, 2021. ACL. https://aclanthology.org/2021.semeval-1.60/.

Martin, Anna, Jennifer D'Souza, & Ted Pedersen. "Annotation Natural Language Processing Shared Task Descriptions." Poster presented at *[SciNLP 2021](#): 2nd Workshop on Natural Language Processing for Scientific Text* at AKBC 2021. October 2021. Online.

Preprints

Martin-Boyle, Anna, Aahan Tyagi, Marti A. Hearst, & Dongyeop Kang. 2024. "Shallow Synthesis of Knowledge in GPT-Generated Texts: A Case Study in Automatic Related Work Composition." arXiv. February 19, 2024. https://arxiv.org/abs/2402.12255.

Das, Debarati, Karin De Langis, **Anna Martin-Boyle**, Jaehyung Kim, Minhwa Lee, Zae Myung Kim, Shirley Anugrah Hayati, Risako Owan, Bin Hu, Ritik Sachin Parkar, Ryan Koo, Jong Inn Park, Aahan Tyagi, Libby Ferland, Sanjali Roy, Vincent Liu, & Dongyeop Kang. 2024. "Under the Surface: Tracking the Artifactuality of LLM-Generated Data." arXiv. January 26, 2024. https://arxiv.org/abs/2401.14698.

Martin-Boyle, Anna, Andrew Head, Kyle Lo, Risham Sidhu, Marti Hearst, &
  Dongyeop Kang. 2023. "Complex Mathematical Symbol Definition Structures: A Dataset and
  Model for Coordination Resolution in Definition Extraction." arXiv. May 24, 2023.
  https://arxiv.org/abs/2305.14660.

Master's Thesis

Martin, Anna. 2022. "Annotating and Automatically Extracting Task Descriptions
  from Shared Task Overview Papers in Natural Language Processing Domains." Master's Thesis,
  University of Minnesota, Duluth. ProQuest Dissertations Publishing.
  https://conservancy.umn.edu/handle/11299/241255.

AWARDS

2022 -   **The University of Minnesota CSE Graduate Fellowship**
2025   *Three years fully funded*

2022   **UMD Swenson College of Science & Engineering Outstanding Graduate
           Teaching Assistant**

2021   **UMD Computer Science Graduate Research Fellowship.** 2021
              Full summer funding

2020   **NMU Department of Mathematics & Computer Science Outstanding
            Graduate**

SERVICE & OUTREACH

09 / 2024 -   **Honors Mentor Connection**
05 / 2025   *Mentored a Wayzata Public High School student on a research project of her
                choosing*

01 / 2025 -   **GroupLens Lab Meeting Coordinator**
05 / 2025

08 / 2023 -   **Minnesota NLP Lab Meeting Coordinator**

05 / 2024

08 / 2022 -   **Minnesota NLP Lab Server Admin**
05 / 2024

08 / 2022 -   **Minnesota NLP Seminar Organization Committee**
12 / 2022