MARISSA RADENSKY
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I am a **human-AI interaction** researcher who develops prototypes and conducts mixed-methods research in order to investigate methods to improve people's **understanding** and **control of AI** systems. In particular, I enjoy exploring the many potential applications of **generative AI** to improve people's lives, with a focus on **transparent** and **responsible** design.

EDUCATION

University of Washington, Seattle, WA | *Ph.D. in Computer Science (Advisor: Dan Weld)* Expected Summer 2025
• Relevant Courses: Introduction to Deep Learning, Natural Language Processing, Advanced Topics in Human-Computer Interaction, Quantitative Methods in Information Science, Machine Learning, Foundations of Fairness in Machine Learning
Amherst College, Amherst, MA | *Bachelor of Arts in Computer Science, Physics (GPA: 3.83)* May 2019

RESEARCH EXPERIENCE

University of Washington Lab for Human-AI Interaction, Seattle, WA | *Graduate Research Assistant* Sep 2019-Present
• Led 0-1 design, development, and mixed-methods evaluation of human-LLM system with 3 RAG modules for facet-based scientific idea generation and novelty assessment. *Key Impact*: system significantly increased creativity support compared to strong baseline.
• Co-designed, conducted, and co-analyzed mixed-methods user studies examining how best to explain/rank AI scholar recommendations. *Key Impact*: found facet-based ranking surfaces recommendations useful for generating novel research directions.
Allen Institute for Artificial Intelligence Semantic Scholar Team, Seattle, WA | *Research Intern* June-Dec 2020, June-Oct 2023
• Designed, developed, and evaluated (mixed-methods) human-LLM tool for writing research-paper blog posts with interactive source outline. *Key Impact*: tool significantly increased writers' blog post satisfaction under time constraints, compared to strong baseline.
• Examined (mixed-methods user studies) how local vs global explanations affect understanding/control of AI paper recommendations. *Key Impact*: found both explanations, more than either alone, may help users explain how to improve recommendations.
Google Conversational AI Team, Seattle, WA | *Student Researcher* June-Sep 2022
• Investigated, through a mixed-methods Wizard-of-Oz study, how different confidence signal patterns in music conversational recommender system (CRS) impact user trust and reliance. *Key Impact*: presented 5 design implications for CRS confidence signals.
Microsoft Health Cloud and Data Team, Redmond, WA (Remote) | *Research Intern* June-Sep 2021
• Explored (mixed-methods user studies) how physicians react to AI clinical decision support system (CDSS) alerts for anomalous model input/output. *Key Impact*: found physicians want alerts, but no evidence indicating they improve physician-AI team accuracy.
Carnegie Mellon University HCII, Pittsburgh, PA | *Undergraduate Research Assistant* May-Nov 2017, May 2018-May 2019
• Designed and analyzed formative study of how users express conditionals in programming-by-demonstration (PBD) system for smartphone task automation. *Key Impact*: found users often omit desired else statements when explaining conditionals.
• Analyzed interviews using open coding to better understand data scientists' experiences using literate programming tools.
National University of Singapore CLeAR Lab, Singapore | *Undergraduate Research Assistant* Jan-May 2018
• Constructed bird classification survey for studying whether communicating confidence and explanations between human and AI bot leads the human-AI team to make better decisions than that of the human or AI bot alone.
UMass Amherst Advanced Human Health Analytics Lab, Amherst, MA | *Undergraduate Research Assistant* Jan-May 2017
• Collaborated with other students to 1) determine possible features for a machine-learning algorithm to measure how much stroke patients, wearing finger and wrist sensors, use their hands for fine-hand movements and 2) collect/process data for trials with sensors.

PUBLICATIONS

• **Marissa Radensky**, Simra Shahid, Raymond Fok, Pao Siangliulue, Daniel S. Weld, Tom Hope. Scideator: Human-LLM Scientific Idea Generation Grounded in Research-Paper Facet Recombination. *In submission.*
• **Marissa Radensky**, Daniel S. Weld, Joseph Chee Chang, Pao Siangliulue, Jonathan Bragg. Papers-to-Posts: An LLM-Generated, Interactive Long-Document Outline for Detailed Summarization Tasks. *In submission.*
• Raymond Fok, Joseph Chee Chang, **Marissa Radensky**, Pao Siangliulue, Jonathan Bragg, Amy X. Zhang, Daniel S. Weld. Facets, Taxonomies, and Syntheses: Navigating Structured Representations in LLM-Assisted Literature Review. *In submission.*
• Peter Jansen, Oyvind Tafjord, **Marissa Radensky**, Pao Siangliulue, Tom Hope, Bhavana Dalvi Mishra, Bodhisattwa Prasad Majumder, Daniel S. Weld, Peter Clark. CodeScientist: End-to-End Semi-Automated Scientific Discovery with Code-based Experimentation. *Findings of the Association for Computational Linguistics (ACL Findings '24).*
• **Marissa Radensky**, Julie Anne Séguin, Jang Soo Lim, Kristen Olson, Robert Geiger. "I Think You Might Like This": Exploring Effects of Confidence Signal Patterns on Trust in and Reliance on Conversational Recommender Systems. *Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency (FAccT '23).*
• Jason Portenoy, **Marissa Radensky**, Jevin West, Eric Horvitz, Daniel S. Weld, and Tom Hope. Bursting Scientific Filter Bubbles: Boosting Innovation via Novel Author Discovery. *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI '22).*
• Toby Jia-Jun Li, **Marissa Radensky**, Justin Jia, Kirielle Singarajah, Tom M. Mitchell, and Brad A. Myers. PUMICE: A Multi-Modal Agent that Learns Concepts and Conditionals from Natural Language and Demonstrations. *Proceedings of the 32nd*

Annual ACM Symposium on User Interface Software and Technology (UIST '19).

• Mary Beth Kery, **Marissa Radensky**, Mahima Arya, Bonnie E. John, and Brad A. Myers. The Story in the Notebook: Exploratory Data Science using a Literate Programming Tool. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18).*

SELECTED WORKSHOP PAPERS AND EXTENDED ABSTRACTS

• **Marissa Radensky**, Dustin Burson, Rajya Bhaiya, and Daniel S. Weld. Exploring How Anomalous Model Input and Output Alerts Affect Decision-Making in Healthcare. *Workshop on Trust and Reliance in AI-Human Teams at the 2022 CHI Conference on Human Factors in Computing Systems (CHI TRAIT '22).*

• **Marissa Radensky**, Doug Downey, Kyle Lo, Zoran Popović, and Daniel S. Weld. Exploring the Role of Local and Global Explanations in Recommender Systems. *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems (CHI EA '22).*

LEADERSHIP, VOLUNTEER, AND OTHER PROFESSIONAL EXPERIENCE

Program Committee for Conferences/Workshops, Remote | *Member* 2022-2025
• IUI ('25), CHI TRAIT/TREW Workshop ('22, '23, '24), EMNLP Demo ('24)
Peer Review for Conferences/Workshops, Remote | *Reviewer* 2021-2025
• CHI ('21, '24, '25), UIST ('24, '25), CSCW ('23, '24), IUI ('25), IJHCI ('23), NeurIPS SATA Workshop ('24)
University of Washington Allen School Pre-Application Review Service, Seattle, WA | *Reader* Nov 2020, 2021, 2022, 2023
University of Washington Allen School DEI Committee, Seattle, WA | *Member* June 2020-June 2022
Amherst College Women in Computer Science, Amherst, MA | *Co-President (final year)* Sep 2015-May 2019
Computer Science Teaching Assistance, Amherst, MA | *Teaching Assistant* Jan-May 2016, Sep 2018-May 2019
Computer Science Assignment Grading, Amherst, MA | *Grader* Sep-Dec 2017
Physics Teaching Assistance, Amherst, MA | *Teaching Assistant* Sep-Dec 2016, Sep-Dec 2017
Splash! at Amherst College, Amherst, MA | *Volunteer Teacher* April 2016, April 2017
Startup Internship at Properati, Buenos Aires, Argentina | *Data Analysis Intern* June-Aug 2016

CONFERENCES AND WORKSHOPS

NAACL AI & Scientific Discovery Workshop, Albuquerque, NM | *Presenter* May 2025
AAAI Symposium on Integrated Approaches to Computational Scientific Discovery, Washington, D.C. | *Presenter* Nov 2024
Graduate Student Symposium at ACM Conference on Creativity & Cognition, Chicago, IL | *Presenter* June 2024
ACM Conference on Fairness, Accountability, and Transparency, Chicago, IL | *Presenter* June 2023
ACM Conference on Human Factors in Computing Systems TRAIT Workshop, virtual | *Presenter* May 2022, April 2023
ACM Conference on Human Factors in Computing Systems, virtual | *Presenter* May 2022
Measuring the Quality of Explanations in Recommender Systems Workshop at ACM SIGIR, virtual | *Presenter* July 2022
VL/HCC Conference, Lisbon, Portugal | *Poster Presenter* Oct 2018
CRAW Grace Hopper Celebration, Orlando, FL | *Scholarship Attendee* Oct 2017

SKILLS

• **Programming**: Python, TypeScript, React, HTML, CSS, RStudio, JavaScript, Java, GitHub, Docker, PyTorch, TensorFlow, RAG
• **Other Tools:** Figma, Google Workspace, Microsoft Office, Amazon MTurk, PostgresSQL
• **Research Methods:** mixed methods, user studies (formative, lab, deployment), surveys, interviews, lo-fi (paper, wireframe, mockup) and hi-fi (coded) prototyping, statistical analysis, behavioral data collection and analysis, thematic analysis
• **Languages:** Portuguese and Spanish