

## MARISSA RADENSKY

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### RESEARCH INTERESTS

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- Human-AI interaction, appropriate trust of and reliance on AI, explainable AI

### EDUCATION

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**University of Washington**, Seattle, WA | *Ph.D. in Computer Science* Expected 2024-2025

- Advisor: Dan Weld
- 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* May 2019
- B.A. in Computer Science, Physics (GPA: 3.83)

### PUBLICATIONS

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- 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)*.

### WORKSHOPS, EXTENDED ABSTRACTS, ETC.

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- **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)*.
- Toby Jia-Jun Li, **Marissa Radensky**, Justin Jia, Kirielle Singarajah, Tom M. Mitchell, and Brad A. Myers. Interactive Task and Concept Learning from Natural Language Instructions and GUI Demonstrations. *Workshop on Intelligent Process Automation at the 2020 AAAI Conference on Artificial Intelligence (AAAI IPA '20)*.
- Toby Jia-Jun Li, **Marissa Radensky**, Tom M. Mitchell, and Brad A. Myers. A Multi-Modal Approach to Concept Learning in Task Oriented Conversational Agents. *Workshop on Conversational Agents: Acting on the Wave of Research and Development at the 2019 CHI Conference on Human Factors in Computing Systems (CHI ConvAI '19)*.
- **Marissa Radensky**, Toby Jia-Jun Li, and Brad A. Myers. How End Users Express Conditionals in Programming by Demonstration for Mobile Apps. *Poster Track at the 2018 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC Poster '18)*.

### RESEARCH EXPERIENCE

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**University of Washington**, Seattle, WA | *Graduate Research Assistant* Sep 2019-Present

- Investigating how best to present AI uncertainty in binary classification to help users make more accurate decisions
- Designed, conducted, and analyzed a user study to investigate how AI alerts for very high and low confidence in a clinical decision-support system may impact radiologists' appropriate reliance upon the system
- Co-designed, conducted, and co-analyzed two user studies investigating how best to explain and rank author recommendations to help researchers overcome academic silos
- Designed, conducted, and analyzed preliminary studies to investigate how local (instance-level), global (model-level), and both explanations impact users' ability to understand, control, and learn from a recommender system

**Google Conversational AI Team**, Mountain View, CA (Remote) | *Student Researcher* June-Sep 2022

- Designed, conducted, and analyzed a mixed-methods user study investigating how different patterns of confidence communication in a conversational recommender system may impact users' trust and reliance

**Microsoft Health Cloud and Data Team**, Redmond, WA (Remote) | *Research Intern* June-Sep 2021

- Designed, conducted, and analyzed a user study to investigate how users of an AI clinical decision support system react to alerts for anomalous model input and output

- Allen Institute for Artificial Intelligence (Semantic Scholar)**, Seattle, WA (Remote) | *Research Intern* June-Dec 2020
- Designed, conducted, and analyzed a mixed-methods exploratory study and a controlled user study to investigate how local, global, and both explanations serve different purposes in a research-paper recommender system
- Carnegie Mellon University**, Pittsburgh, PA | *Undergraduate Research Assistant* May-Nov 2017, May 2018-May 2019
- Designed and analyzed formative study of how end user programmers express conditionals in programming-by-demonstration (PBD) systems for smartphone task automation
  - Implemented conditional functionality for PBD system for smartphone task automation
  - Analyzed interviews using open coding to better understand data scientists' experiences using literate programming tools
  - Developed software for an exploratory data analysis versioning tool to compare output of multiple versions of a program
- National University of Singapore**, Singapore | *Undergraduate Research Assistant* Jan-May 2018
- Constructed bird classification survey to investigate 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
- University of Massachusetts Amherst**, Amherst, MA | *Undergraduate Research Assistant* Jan-May 2017
- Collaborated with three other students to 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
  - Collected and processed data for trials with healthy subjects wearing the sensors
- Amherst College**, Amherst, MA | *Undergraduate Research Assistant* Sep-Dec 2016
- Built part of a program for acquiring and processing laboratory data such as magnetic field strength using LabVIEW

## LEADERSHIP AND OTHER PROFESSIONAL EXPERIENCE

- University of Washington Allen School Pre-Application Review Service**, Seattle, WA | *Reader* Nov 2020, 2021, 2022
- Provided feedback on the statements of purpose and resumes of 4 prospective computer science PhD applicants
- University of Washington Allen School DEI Committee**, Seattle, WA | *Member* June 2020-June 2022
- Supported initiatives to improve diversity, equity, and inclusion in areas such as admissions, faculty recruiting, and outreach
- Amherst College Women in Computer Science**, Amherst, MA | *Co-President (final year)* Sep 2015-May 2019
- Collaborated with club members to promote club lunches in order to foster a community for women in computer science
  - Organized logistics for attending Grace Hopper Celebration Conference
- Computer Science Teaching Assistance**, Amherst, MA | *Teaching Assistant* Jan-May 2016, Sep 2018-May 2019
- Guided introductory computer science students in completing homework questions using their own thought processes
- Computer Science Assignment Grading**, Amherst, MA | *Grader* Sep-Dec 2017
- Graded introductory computer science students' programming assignments
- Physics Teaching Assistance**, Amherst, MA | *Teaching Assistant* Sep-Dec 2016, Sep-Dec 2017
- Communicated concepts to introductory physics students to assist them in understanding class and homework assignments
- Computing Research Association for Women GHC Scholarship**, Orlando, FL | *Scholar* Oct 2017
- Participated in Grace Hopper Celebration conference with scholarship based on demonstrated interest in computing research
- Splash! at Amherst College**, Amherst, MA | *Volunteer Teacher* April 2016, April 2017
- Organized and conducted a class with a fellow student for a group of local middle and high school students to provide a fun learning experience for them and spark their interest in topics such as fractals and electronic circuits
- Startup Internship at Properati**, Buenos Aires, Argentina | *Data Analysis Intern* June-Aug 2016
- Scraped and analyzed data for interactive maps and data tables for a website managing Latin American real estate transactions

## RELEVANT CONFERENCES AND EVENTS ATTENDED

- Measuring the Quality of Explanations in Recommender Systems Workshop at ACM SIGIR**, virtual | *Presenter* July 2022
- ACM Conference on Human Factors in Computing Systems**, virtual | *Attendee/Presenter* May 2021, 2022
- Richard Tapia Celebration of Diversity in Computing Conference**, virtual | *Attendee* Sep 2020
- VL/HCC Conference**, Lisbon, Portugal | *Poster Presenter* Oct 2018
- Grace Hopper Celebration of Women in Computing Conference**, Houston, TX | *Attendee* Oct 2016, Oct 2017, Sep 2018
- Women Techmakers Summit at Google Singapore**, Singapore | *Attendee* April 2018

## SKILLS

- Advanced knowledge of Python, JavaScript, Java
- Intermediate knowledge of Typescript, React, HTML, CSS, R, Android Studio, Amazon MTurk
- Basic knowledge of PyTorch, Keras, TensorFlow, scikit-learn, Ruby, Datawrapper, Carto, Postman, QGIS
- Proficient in Portuguese and Spanish