

Xinru Wang

Updated March 9, 2025

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 [Google Scholar](#)

Summary My research intersects Human-Computer Interaction (HCI) and AI, with a focus on Explainable AI (XAI). I iterate on the **evaluation and design of user-centered XAI systems for AI-assisted human decision-making**, in the context of fast-evolving *AI models* and diverse *user interfaces*.

Education **Purdue University** West Lafayette, IN
Ph.D. in Computer Science Aug. 2019 – Present
Thesis: Towards Interpretable AI-Assisted Decision-Making: Human-Centered Evaluation and Design of AI Explanations
Thesis Committee: [Prof. Ming Yin](#) (Advisor), Prof. Ninghui Li, Prof. Alexandros Psomas, Prof. Tianyi Zhang

Peking University Beijing, China
B.S. in Psychology (Dual Degree) Sept. 2016 – Jun. 2019
B.S. in Intelligence Science and Technology Sept. 2015 – Jun. 2019
Thesis: “Analysis of MOOC Forum Data towards AI Support”
Thesis Advisor: Prof. Xiaoming Li

Publications **Beyond Recommender: An Exploratory Study of the Effects of Different AI Roles in AI-Assisted Decision Making**
Shuai Ma, Chenyi Zhang, **Xinru Wang**, Xiaojuan Ma, Ming Yin.
Under Review

“Let’s Resolve Conflicts”: A Human-AI Deliberation Framework for AI-Assisted Decision-Making
Shuai Ma, Qiaoyi Chen, **Xinru Wang**, Chengbo Zheng, Zhenhui Peng, Ming Yin, Xiaojuan Ma.
Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI). 2025.

Less or More: Towards Glanceable Explanations for LLM Recommendations Using Ultra-Small Devices
Xinru Wang, Mengjie Yu, Hannah Nguyen, Michael Iuzzolino, Tianyi Wang, Peiqi Tang, Natasha Lynova, Co Tran, Ting Zhang, Naveen Sendhilnathan, Hrvoje Benko, Haijun Xia, Tanya Jonker.
Proceedings of the 30th International Conference on Intelligent User Interfaces (IUI). 2025.

Human-LLM Collaborative Annotation Through Effective Verification of LLM Labels

Xinru Wang, Hannah Kim, Sajjadur Rahman, Kushan Mitra, Zhengjie Miao.

Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI). 2024.

Human-Centered Evaluation of Explanations in AI-Assisted Decision-Making

Xinru Wang.

Companion Proceedings of the 29th International Conference on Intelligent User Interfaces (IUI Doctoral Consortium). 2024.

“Are You Really Sure?” Understanding the Effects of Human Self-Confidence Calibration in AI-Assisted Decision Making

Shuai Ma, **Xinru Wang**, Ying Lei, Chuhan Shi, Ming Yin, Xiaojuan Ma.

Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI). 2024.

The Effects of AI Biases and Explanations on Human Decision Fairness: A Case Study of Bidding in Rental Housing Markets

Xinru Wang, Chen Liang, Ming Yin.

Proceedings of the 32nd International Joint Conference on Artificial Intelligence (IJCAI). 2023.

Who Should I Trust: AI or Myself? Leveraging Human and AI Correctness Likelihood to Promote Appropriate Trust in AI-Assisted Decision-Making

Shuai Ma, Ying Lei, **Xinru Wang**, Chengbo Zheng, Chuhan Shi, Ming Yin, Xiaojuan Ma.

Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI). 2023.

Watch Out For Updates: Understanding the Effects of Model Explanation Updates in AI-Assisted Decision Making

Xinru Wang, Ming Yin.

Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI). 2023.

Will You Accept the AI Recommendation? Predicting Human Behavior in AI-Assisted Decision Making

Xinru Wang, Zhuoran Lu, Ming Yin.

Proceedings of the 2022 ACM Web Conference (WWW). 2022.

Effects of Explanations in AI-Assisted Decision Making: Principles and Comparisons

Xinru Wang, Ming Yin.

ACM Transactions on Interactive Intelligent Systems (TiiS). 2022

Are Explanations Helpful? A Comparative Study of the Effects of Explanations in AI-Assisted Decision-Making

Xinru Wang, Ming Yin.

Proceedings of the 26th International Conference on Intelligent User Interfaces (IUI). 2021.

Professional
Experience

Purdue University

Research Assistant

West Lafayette, IN, US

Aug. 2019 - Present

– *Advisor: Ming Yin, Assistant Professor*

– Conduct large-scale online user studies to evaluate the impact of AI explanation designs on human decision-making processes.

Meta Reality Labs

Research Intern

Redmond, WA, US

Sep. 2023 - Mar. 2024

– *Mentor: Anna Mengjie Yu*

– Developed methods for delivering glanceable explanations for LLM-driven personal assistants on ultra-small devices. Research insights contributed to the development of explainable AI features on Meta’s future AR device.

Megagon Labs

Research Intern

Mountain View, CA, US

May. 2023 - Aug. 2023

– *Mentor: Hannah Kim, Zhengjie Miao*

– Developed and evaluated a human-LLM collaborative annotation framework for natural language tasks. The findings directly contributed to the development of MEGAnno+, the company’s newly released data annotation tool.

University of Michigan

Summer Research Intern

Ann Arbor, MI, US

Jul. 2018 - Sep. 2018

– *Advisor: Lionel Robert, Professor*

– Investigated bi-directional trust in semi-autonomous vehicles through user testing and trust modeling.

Kendall Square Capital

Machine Learning Intern

Beijing, China

Jan. 2019 - Apr. 2019

– Extracted time-series features from the limit order book data for prediction of mid-price movement in high frequency trading.

DiDi

Machine Learning Intern

Beijing, China

Sep. 2018 - Jan. 2019

– Implemented machine learning models to predict drivers’ order-taken behavior and waiting-time on a million-scale database.

Selected
Talks

User-Centered Evaluation and Design of AI Explanations in AI-Assisted Decision-Making

Presented at UNC Chapel Hill

Feb. 2025

Human-LLM Collaborative Annotation Through Effective Verification of LLM Labels

Presented at CHI 2024

May. 2024

Human-Centered Evaluation of Explanations in AI-Assisted Decision-Making

Presented at IUI 2024 Doctoral Consortium

Apr. 2024

Will You Accept the AI Recommendation? Predicting Human Behavior in AI-Assisted Decision Making

Presented at WWW 2022

Apr. 2022

Understanding Human Behavior in AI-Assisted Decision Making: Experiments and Models

Presented at [MIDAS Future Leaders Summit 2022](#)

Apr. 2022

Are Explanations Helpful? A Comparative Study of the Effects of Explanations in AI-Assisted Decision-Making

Presented at IUI 2021

Apr. 2021

Service

Program Committee

ACM Conference on Fairness, Accountability, and Transparency (FAccT): 2025, 2023

ACM Symposium on Eye Tracking Research & Applications (ETRA): 2025

ACM Conference on Intelligent User Interfaces (IUI): 2025

ACM CHI Workshop on Human-Centered Explainable AI (HCXAI): 2024, 2023, 2022

Assistant to Subcommittee Chair

ACM Conference on Human Factors in Computing Systems (CHI): 2025

Conference Reviewer

ACM Conference on Human Factors in Computing Systems (CHI): 2025, 2024, 2023

ACM Conference on Human Factors in Computing Systems (CHI) Late-Breaking Work: 2025, 2024, 2023

ACM Conference on Designing Interactive Systems (DIS): 2024

ACM/IEEE International Conference on Human-Robot Interaction (HRI) alt.HRI: 2024

Journal Reviewer

IEEE Transactions on Human-Machine Systems (THMS)
ACM Transactions on Interactive Intelligent Systems (TiiS)
Transactions on Intelligent Systems and Technology (TIST)

Student Volunteer

ACM Conference on Intelligent User Interfaces (IUI): 2024
ACM Conference on Research and Development in Information Retrieval (SIGIR): 2018

Teaching

CS475 Human-Computer Interaction, Purdue University

Graduate Teaching Assistant for Prof. Ming Yin Spring 2025
– Undergraduate-level course with 90 students.
– Developed homework questions and graded assignments.

CS471 Introduction to Artificial Intelligence, Purdue University

Head Graduate Teaching Assistant for Prof. Raymond A. Yeh Spring 2023
– Undergraduate-level course with 200 students.
– Led a team of five Teaching Assistants, developed homework questions, graded assignments, and conducted office hours.
– Recognized with the Graduate Teaching Award in the CS Department.
Head Graduate Teaching Assistant for Prof. Ming Yin Summer 2022, Fall 2022
Graduate Teaching Assistant for Prof. Jennifer Neville Fall 2019

CS242 Introduction To Data Science, Purdue University

Graduate Teaching Assistant for Prof. Tony Bergstrom Spring 2020
– Undergraduate-level course with 150 students.
– Developed homework questions.

CS38001 Python Programming, Purdue University

Graduate Teaching Assistant for Prof. Ruby Tahboub Fall 2019, Spring 2020
– Undergraduate-level course with 70 students.
– Developed homework questions, graded assignments, and led lab sessions and office hours.

Mentoring

Songyu He (HKUST undergraduate student) Fall 2024
Hannah Nguyen (Meta Reality Labs research assistant) Spring 2024

Honors and Awards

NSF Student Travel Award (IUI 2024) 2024
Apple PhD Fellowship Nominee (Purdue University) 2024
Graduate Teaching Award (Purdue University) 2023
Summit Attendee and Speaker (MIDAS Future Leaders Summit) 2022
Women in Science Program Travel Grant (Purdue University) 2022

Microsoft Research PhD Fellowship Nominee (Purdue University)	2022
Academic Excellence Award (Peking University, top 10%)	2018
Fei-Xun Scholarship (Peking University)	2018
Academic Excellence Award (Peking University, top 15%)	2016
May 4th Scholarship (Peking University)	2016

Skills **Programming:** Python, R, HTML/CSS/JavaScript, SQL, MATLAB, C/C++, Java
Tools & Frameworks: Flask, Pytorch, Sklearn, OpenAI, HuggingFace, Meteor
User Study: Online (AMTurk, Prolific) and in-lab
Data Analysis: Quantitative (e.g. ANOVA, regressions, SEM) and qualitative (e.g. thematic analysis)
Languages: English (GRE 162+170+3.5, TOEFL 111), Mandarin (Native)

Reference [Ming Yin](#) (PhD Advisor)
Assistant Professor in the Department of Computer Science
Purdue University

[Chen Liang](#)
Assistant Professor of Operations and Information Management
University of Connecticut

[Hannah Kim](#)
Research Scientist
Megagon Labs

Others available upon requests.