

Xinyi Lu

✉ lwlyx@umich.edu <https://lwlyx.github.io/Portfolio/> ☎ 734-548-7804

RESEARCH INTEREST

My research interest lies in the intersection of Human-Computer Interaction, Computer Science and Education. Specifically, I'm interested in designing and developing Human-AI collaborative systems that supports the creation of high-quality educational content. This line of work includes systems that provides instructors with controllable AI assistance for designing quiz questions and worked examples, and a pipeline of using LLM-simulated students to evaluate and refine question items. Building on my experience of designing AI-based systems for education, I explore the desirable amount and form of AI assistant for educational content that facilitates active learning.

EDUCATION

University of Michigan <i>Ph.D. student in Computer Science Engineering, adviser by <u>Dr. Xu Wang</u></i>	Sep 2023 – Present <i>Ann Arbor, MI</i>
University of Michigan <i>BS in Computer Science Engineering</i>	Sep 2021 – May 2023 <i>Ann Arbor, MI</i>
Shanghai Jiao Tong University <i>BS in Electrical and Computer Engineering</i>	Sep 2019 – Aug 2021 <i>Shanghai, China</i>

STRINGENTLY PEER-REVIEWED PUBLICATIONS

- **Xinyi Lu**, Mitchell Dudley, Raelin Musuraca, Lu Wang, Xu Wang. “Exemplify: Understanding How Instructors Use AI to Create Interactive Worked Examples as Scaffolding Exercises” [In Submission].
- Xiaoyu Liu, **Xinyi Lu**, Soobin Jeon, Yunyan Li, Joshua Littenberg-Tobias, Shawn Y Stevens, Ying Xu, Xu Wang. “To Chat or to Quiz?: Examining the Pedagogical Benefits and Risks of AI Tutors in Facilitating High School Science Learning from Videos”. [In Submission].
- Xinyue Chen, Nathan Yap, **Xinyi Lu**, Aylin Gunal, Xu Wang. MeetMap: Generating Dialogue Maps as Real-Time Cognitive Scaffolds for Online Meetings. In Proceedings of the ACM on Human-Computer Interaction (**CSCW 2025**)
- **Xinyi Lu**, Xu Wang. “Generative Students: Using LLM-Simulated Student Profiles to Support Question Item Evaluation”. In Proceedings of the eleventh ACM Conference on Learning@Scale (**L@S 2024**).
- **Xinyi Lu**, Simin Fan, Jessica Houghton, Lu Wang, Xu Wang. “ReadingQuizMaker: A Human-NLP Collaborative System that Supports Instructors to Design High-Quality Reading Quiz Questions”. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (**CHI 2023**). **Best Paper Honorable Mention** .

POSTERS, DEMOS, PRESENTATIONS AND WORKSHOPS

- **Xinyi Lu**, Xu Wang. “Generative Students: Using LLM-Simulated Student Profiles to Support Question Item Evaluation”. Paper presentation at the Annual Meeting of the National Council on Measurement in Education (**NCME 2025**).
- Steven Moore, Anjali Singh, **Xinyi Lu**, Hyoungwook Jin, Hassan Khosravi, Paul Denny, Christopher Brooks, Xu Wang, Juho Kim, John Stamper. “Learnersourcing: Student-generated Content@ Scale: 2nd Annual Workshop”. In Proceedings of the eleventh ACM Conference on Learning@Scale (**L@S 2024**).

TEACHING EXPERIENCE

Introduction to Machine Learning, Instructional Aide <i>University of Michigan. Instructor: <u>Dr. Sindhu Kutty</u></i>	Sep 2022 – Dec 2022 <i>Ann Arbor, MI</i>
Discrete Mathematics, Teaching Assistant <i>Shanghai Jiao Tong University. Instructor: <u>Dr. Runze Cai</u></i>	May 2022 – Aug 2022 <i>Shanghai, China</i>

MENTORING

- **ZeJia Shen**, Undergraduate student in University of Michigan, CSE [2024.9 -]
- **Aditya Mahesh**, Undergraduate student in University of Michigan, CSE [2024.9 -]
- **Yuqing Luo**, Undergraduate student in University of Michigan, CSE [2024.5 -]
- **Jessica Li**, Undergraduate student in University of Michigan, CS [2024.5 - 2024.9]
- **Xiaoyu Liu**, Master student in University of Michigan, CSE [2024.1 - 2024.8]

COMMUNITY SERVICE

- **Workshop Organizer:** Learnersourcing: Student-Generated Content @ Scale (L@S 2024)
- **Reviewer:** CSCW 2023 Posters, CHI 2024, L@S 2024, CHI 2025
- **Co-leader:** Explore Computer Science Research program (Explore CSR 2024-2025) at University of Michigan

HONORS AND SCHOLARSHIPS

- Rackham Traveling Grant (\$900), University of Michigan, 2024
- CSE Fellowship (\$36000), University of Michigan, 2023
- Gary Marsden Travel Awards (\$2500), SIGCHI, 2023
- Best Paper Honorable Mention Award (5%), ACM CHI 2023
- Graduate with Honors, Shanghai Jiao Tong University, 2023
- Finalist, Interdisciplinary Contest In Modeling (ICM), 2021
- Student Development Scholarship, Shanghai Jiao Tong University, 2020, 2021
- Undergraduate Outstanding Scholarship, Shanghai Jiao Tong University, 2020, 2021