

Xinyue Chen

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Bio

My research focuses on **designing and developing interactive systems** that enhance active participation and foster common ground in video meetings and hybrid communication settings. Building on my experiences in designing AI-assisted meeting systems, I explored the nuances of the **AI assistance dilemma in human-human communication** - to determine the optimal balance for providing AI assistance versus maintaining user agency in human-human communication processes. Besides, my work has been deployed to support communication and **amplify marginalized voices for diverse teams**, e.g., promoting equitable and inclusive participation for underrepresented students in STEM education.

Research Interest

Human-Computer Interaction; Human-centered AI; AI-Mediated Communication; Virtual and hybrid Meeting; Team collaboration.

Education

University of Michigan

PH.D. CANDIDATE, COMPUTER SCIENCE AND ENGINEERING

- Advisor: Dr. Xu Wang

Ann Arbor, MI

2021.09 - 2026.05 (expected)

Peking University

B.S IN INFORMATION MANAGEMENT

- Graduate with Honors
- undergrad research advisor: Dr. Pengyi Zhang

Beijing, China

2017.09 - 2021.06

Publications

STRINGENTLY PEER-REVIEWED CONFERENCE AND JOURNAL PUBLICATION

- [C.05] **Xinyue Chen**¹, Vitaliy Popov*, Jingying Wang, Michael Kemp, Gurjit Sandhu, Taylor Kantor, Natalie Mateju, Xu Wang. Looking Together ≠ Seeing the Same Thing: Understanding Surgeons' Visual Needs During Intra-operative Coordination and Instruction. (**CHI2024**) (🏆 **Best Paper Honorable Mention Award Top 5%**)
- [C.04] **Xinyue Chen**, Shuo Li, Shipeng Liu, Robin Fowler, Xu Wang. MeetScript: Designing Transcript-based Interactions to Support Active Participation in Group Video Meetings. In Proceedings of the ACM on Human-Computer Interaction (**CSCW2023**)
- [C.03] **Xinyue Chen***, Si Chen*, Zhicong Lu, and Yun Huang. "My Culture, My People, My Hometown": Chinese Ethnic Minorities Seeking Cultural Sustainability by Video Blogging. In Proceedings of the ACM on Human-Computer Interaction (**CSCW2023**)
- [C.02] **Xinyue Chen**, Xu Wang. Towards Scaling Mixed-Methods Formative Assessments(MixFA) in Classrooms: A Clustering Pipeline to Identify Student Knowledge. In International Conference on Artificial Intelligence in Education (**AIED2022**)
- [C.01] **Xinyue Chen**, Si Chen, Xu Wang, and Yun Huang. "I was afraid, but now I enjoy being a streamer!": Understanding the Challenges and Prospects of Using Live Video Streaming for Online Education. In Proceedings of the ACM on Human-Computer Interaction (**CSCW2021**). (🏆 **Best Paper Honorable Mention Award Top 5%**)

¹* means equally contributed co-first author

PAPER UNDER SUBMISSION

- [S.02] **Xinyue Chen**, Nathan Yap, Xinyi Lu, Aylin Gunal, Xu Wang. MeetMap: Generating Dialogue Maps as Real-Time Cognitive Scaffolds for Online Meetings.
- [S.01] **Xinyue Chen**, Rehema Abulikemu, Ke Li, Pengyi Zhang . Understanding the Current Practices and Challenges of Personal Tracking in Self-Regulated Learning in Live-streaming.

WORKSHOP/POSTER/DEMO

- [W.03] **Xinyue Chen**, Xu Wang. Balancing Cognitive Effort and AI Assistance: an AI-assisted Sensemaking Framework for Synchronous Communication (**CHI2024 Sensemaking Workshop**)
- [W.02] **Xinyue Chen**, Shuo Li, Shipeng Liu, Robin Fowler, Xu Wang. MeetScript: Transcript-based Interactions Give People Additional Participation Channels in Group Video Meetings. (**CSCW2023 Demo**)
- [W.01] Vitaliy Popov, **Xinyue Chen**, Michael Kemp, Gurjit Sandhu, Taylor Kantor, Natalie Mateju, Xu Wang. Towards Supporting Intraoperative Coordination and Entrustment in Surgical Faculty-Resident Dyads: Looking Together is not Seeing the Same Thing. In CHI Conference on Human Factors in Computing Systems Extended Abstracts (**CHI2022 LBW**)

Presentations

- 2023.11 . *Leveraging AI to Support Participation and Sense-making in Synchronous Group Discussion*. Research Presentation: Notre Dame Trustworthy AI Lab for Education Summit, Notre Dame, U.S.A.
- 2023.10 . *MeetScript: Transcript-based Interactions Give People Additional Participation Channels in Group Video Meetings*. . Paper Presentation: CSCW2023, Minneapolis, U.S.A.
- 2022.07 . *Towards Scaling Mixed-Methods Formative Assessments(MixFA) in Classrooms: A Clustering Pipeline to Identify Student Knowledge*. Paper Presentation: AIED2022, Durham, UK.
- 2020.10 . *"I was afraid, but now I enjoy being a streamer!": Understanding the Challenges and Prospects of Using Live Video Streaming for Online Education*. Paper Presentation, CSCW2020, Virtual.

Research Experience

- 2021- now **University of Michigan**, Research Assistant, Advisor: Xu Wang
- 2020-2021 **University of Illinois Urbana-Champaign**, Remote Research Intern, Advisor: Yun Huang
- 2017-2021 **Peking University**, Undergraduate research Assistant, Advisor: Pengyi Zhang

Professional Experience

- 2020-2021 **Research Intern, Marginnote <https://www.marginnote.com>** , As a core member of the start-up team, I lead the user experience and product team to explore ways to help people with note-taking and sense-making in academic and scientific reading, integrating novel design for flash-card, mind-mapping, and annotation to connect multiple documents and in-context note-taking with expanding space flexibly on PDF.

Awards, Fellowships, & Grants

2024.04	Honorable Mention Award (5%) , ACM CHI 2024	
2024.03	Barbour Scholars 2024-2025 , the most prestigious scholarship funds exceptional women from Asia in University of Michigan	\$36000
2023.10	Rackham Traveling Grant , University of Michigan	\$900
2022.07	Rackham Traveling Grant , University of Michigan	\$1100
2021.09	CSE Fellowship , University of Michigan	\$36000
2021.06	Graduate with Honors , Peking University	
2020.10	Honorable Mention Award (5%) , ACM CSCW 2020	
2020.09	Robin Li Scholarship , Peking University	\$3000
2019.09	Merit Student , Peking University	

Teaching Experience

Winter'23	User Interface Development , Graduate Student Instructor, University of Michigan.	<i>MI, US</i>
Spring'21	Information Organization , Teaching Assistant, Peking University	<i>Beijing, China</i>

Mentoring

- 2024 **Kunlin Ruan**, Undergraduate student in University of Michigan, CSE
- 2023 **Aylin Gunal**, Master student at University of Michigan, CSE
- 2023 **Nathan Yap**, Undergraduate student in University of Michigan, CSE
- 2022 **Shuo Li**, Undergraduate student in University of Michigan, CSE
- 2022 **Rehema Abulikemu**, Undergraduate student in Peking University, Now Ph.D. Student at Virginia Tech
- 2021 **Ke Li**, Undergraduate student in Peking University, Now UX Researcher at Alibaba

Academic Service

SERVICE

- 2022.05 **CHI2022**, Student Volunteer

PEER REVIEW

Reviews, CHI2022, CHI2023, CHI2024, CSCW2022*, CSCW2024*, UIST2024, CHI LBW 2021, 2022, 2024; CHI Case Study 2022

Associate Chair, CSCW 2023 Poster Circle

* means special recognition for outstanding reviews,

References

Xu Wang, xwanghci@umich.edu, Assistant Professor in University of Michigan

Yun Huang, yunhuang@illinois.edu, Assistant Professor in UIUC

Pengyi Zhang, pengyi@pku.edu.cn, Associate Professor in Peking University

Skills

Technical Skills, Python (Tensorflow, Spacy, Scikit learn), R, C++, Web development (React, Typescript, JQuery, Django, Flask, Node.js), Swift.UI, Database (MySQL, Postgres, ElasticSearch), Generative AI (OpenAI API, LangChain, AutoGPT, Llama2)
UX research, Contextual Inquiry, User Interview, Affinity Diagram, Storyboarding, Prototyping, Thematic analysis