Xinyue Chen

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Bio

I design and study AI systems that enhance human thinking and collaboration. My work designs interactive systems and interaction mechanisms to investigate how AI can mediate common ground—helping individuals externalize evolving reasoning in human-AI interaction, and enabling teams to align understanding, coordinate goals, and co-construct meaning in human-human collaboration. Building on insights from these systems, I further explore—both conceptually and empirically—how AI can augment human cognition by balancing automation and cognitive effort in three domains: learning, knowledge work, and high-stakes collaboration.

Research Interest

Human-Computer Interaction; Human-centered AI; AI-Mediated Communication; Team Collaboration; Human Cognition; AI for Education

Education

University of Michigan — *Ann Arbor, MI*
Ph.D. candidate, Computer Science and Engineering — *2021.09 - 2026.05 (expected)*
- Advisor: Xu Wang
- Committee Members: Eytan Adar, Rada Mihalcea, Colleen Serfeit

Peking University — *Beijing, China*
B.S in Information Management — *2017.09 - 2021.06*
- Graduate with Honors
- undergrad research advisor: Dr. Pengyi Zhang

Publications

Stringently peer-reviewed conference and journal publication

[C.11] **Xinyue Chen**, Kunlin Ruan, Kexin Ju, Nathan Yap, Xu Wang. More AI Assistance Reduces Cognitive Engagement: Examining the AI Assistance Dilemma in AI-Supported Note-Taking. **(CSCW2025)** (🏆**Best Paper Honorable Mention Award Top 5%)**

[C.10] Rishi Vanukuru, Payod Panda, **Xinyue Chen**, Ava Scott, Lev Tankelevitch, Sean Rintel. Strengthening the Chain of Intentionality Across Meetings: AI-Assisted Retrospection and Prospection For Knowledge Work. **(DIS2025)**

[C.09] Ava Scott, Lev Tankelevitch, Payod Panda, Rishi Vanukuru, **Xinyue Chen**, Sean Rintel. What Does Success Look Like? Catalyzing Meeting Intentionality with AI-Assisted Prospective Reflection. **(CHI WORK2025)**

[C.08] **Xinyue Chen**, Lev Tankelevitch, Rishi Vanukuru, Ava Scott, Payod Panda, Sean Rintel. Are We On Track? AI-Assisted Active and Passive Goal Reflection During Meetings. **(CHI2025)**

[C.07] Zhang, Zheng, Weirui Peng, **Xinyue Chen**, Luke Cao, and Toby Jia-Jun Li. LADICA: A Large Shared Display Interface for Generative AI Cognitive Assistance in Co-Located Team Collaboration. **(CHI2025)**

[C.06] **Xinyue Chen**, Nathan Yap, Xinyi Lu, Aylin Gunal, Xu Wang. MeetMap: Real-Time Collaborative Dialogue Mapping with LLMs in Online Meetings. **(CSCW2025)**

[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. **(CSCW2021)**. (🏆**Best Paper Honorable Mention Award Top 5%)**

Under review

[S.02] **Xinyue Chen**, Xu Wang, Varun Manjunatha, Alexa Siu. From Conversation to Human-AI Common Ground: Extracting Cognitive Workflows for Reuse in Sense-making Tasks. In submission to **CHI 2026**.

[S.01] **Xinyue Chen**, Sharon Jessica, Xu Wang, Sindhu Kutty. Scaling Research Experiences through Course Design: A Modular Approach to Undergraduate ML Education. Under submission to **EAAI 2026** .

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

2025.08 . *Human-AI Collaboration for Sense-making tasks: Rethink design for balancing Assistance and human cognitive engagement* . Invited Talk, Zhejiang University, China

2025.06 . *Human-AI Collaboration for Sense-making tasks: Rethink design for balancing Assistance and human cognitive engagement.* Invited Talk, East China Normal University, China

2025.05 . *Are We On Track? AI-Assisted Active and Passive Goal Reflection During Meetings.* Paper Presentation: CHI2025, Japen

2025.04 . *More Assistance, Less Thinking?: Towards Human-AI Design for Cognitive Tasks.* Guest Lecture, EECS 493 User Interface Design, University of Michigan

2024.05 . *Looking Together ≠ Seeing the Same Thing: Understanding Surgeons' Visual Needs During Intra-operative Coordination and Instruction..* Paper Presentation: CHI2024, Honolulu, U.S.A

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.

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[1]* means equally contributed co-first author

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

Adobe Research *San Jose, CA*

RESEARCH SCIENTIST INTERN *Summer 2025*

- Mentors: *Alexa Siu, Sun Tong.*
- Designed and developed a system to support structured memory workflows for iterative, AI-assisted knowledge tasks.
- Conducted formative studies with 10 users to understand intent evolution, memory breakdowns, and reasoning challenges in long-form and daily sense-making tasks with AI.
- Proposed and implemented a dual-layer memory structure that externalizes user intent and supports interactive reuse and adaptation of reasoning processes across tasks.
- Contributed to a CHI 2026 submission (under preparation) and a patent filing.

Microsoft Research Cambridge *Cambridge, UK*

RESEARCH SCIENTIST INTERN *Summer 2024*

- Mentors: *Sean Rintel, Lev Tankelevitch, and Payod Panda.*
- Lead author on a paper under second-round review at CHI 2025 (C.08): Conducted a technology probe study with 15 knowledge workers using real meeting data and two functional AI-assisted reflection probes (passive and active designs) to explore how to support intentional meeting experience.
- Collaborated on two additional papers about meeting lifecycles under second-round review at CHI 2025 (C.09, C.10)
- Delivered internal reports and presentations to the Microsoft Teams product team and made product contributions.

MarginNote *Beijing, China*

USER EXPERIENCE RESEARCHER

- Core team member of the startup behind MarginNote, a note-taking app recognized as a top productivity tool in the App Store.
- Led user research initiatives, gathering insights to inform product design and user experience improvements.
- Developed user personas, journey maps, and wireframes to support UI/UX design and ensure user-centric solutions.
- Led AI integration of generative AI features and intelligent agents to enhance user experience and note-taking workflows.

Awards, Fellowships, & Grants

2025.10	**Honorable Mention Award (Top 5%)**, ACM CSCW 2025	
2025.04	**Rackham Traveling Grant** , University of Michigan	*$1350*
2024.04	**Honorable Mention Award (Top 5%)**, ACM CHI 2024	
2024.03	**Barbour Scholars 2024-2025** , the most prestigious scholarship funds exceptional women from Asia in the University of Michigan	*$40000*
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 (Top 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.
Spring'21	**Information Organization**, Teaching Assistant, Peking University

Mentoring

2025	**Kenneth Xu**, Undergraduate student in University of Michigan, School of Information
2024	**Kexin Ju**, Master student in University of Michigan, School of Information
2024	**Kunlin Ruan**, Undergraduate student in University of Michigan, CSE, now SWE at Stripe
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

Reviewers , CHI2022, CHI2023, CHI2024, CHI2025*, CSCW2022*, CSCW2024*, UIST2024*, UIST2025, CHILBW 2021, 2022, 2024, CHI Case Study 2022
Committess, CSCW 2023 Poster Circle Associate Chair, CHI 2026 Learning Subcommittee Associate Chair
* means special recognition for outstanding reviews,