Yishu Ji

yishuji@cs.washington.edu • www.yishuji.me • yishu-ji-3270a7258

Research Interest: Human-centered AI; Ubiquitous Computing; Behavioral modeling; Digital Health

Education

University of Washington, Seattle **2026 – Present**
Ph.D. in Computer Science and Engineering; Advisor: Anind Dey

Georgia Institute of Technology **2024 – 2026**
M.S. in Computer Science (HCI)

Tsinghua University **2019 – 2024**
B.Eng. in Industrial Engineering & Minor in Psychology

Publications

[1] Yishu Ji, Zhihan Jiang, Will Wang, Yuang Fan, Anind Dey, Xuhai "Orson" Xu. **"OAK-Mind: Zero-Training Mental Health Change Inference from Passive Sensing via Knowledge-Grounded Multi-Agent LLMs"**. [Under Review by]: *The Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies.* **IMWUT.** arXiv:2611.22248

[2] **"Through the AI Mirror: How Sycophantic and Provocative AI Shapes the Social Self in Interpersonal Conflict"**. [Under Review by]: *ACM Conference on Fairness, Accountability, and Transparency.* **FAccT**

[3] Yancheng Cao, Yishu Ji, Yue Fu, Sahiti Dharmavaram, Meghan Turchioe, Natalie C Benda, Lena Mamykina, Yuling Sun, Xuhai "Orson" Xu. **"More than Decision Support: Exploring Patients' Longitudinal Usage of Large Language Models in Real-World Healthcare Settings"**. In: *Proceedings of the CHI Conference on Human Factors in Computing Systems.* **CHI'26**. doi:10.1145/3772318.3791946

[4] Yishu Ji, Aimen Gaba, Reid Laughton, Duen Horng (Polo) Chau, Cindy Xiong Bearfield. **"Capturing the Gist: How Data Approximation Algorithms Align with Human Perception in Time-Series Visualizations"**. [In Revision]: *IEEE Transactions on Visualization and Computer Graphics.* **TVCG**

[5] Zhipeng Li, Yishu Ji, Ruijia Chen, Tianqi Liu, Yuntao Wang, Yuanchun Shi, Yukang Yan. **"Modelling Effects of Visual Attention on Noticeability of Body-Avatar Offsets in Virtual Reality"**. In: *Proceedings of the CHI Conference on Human Factors in Computing Systems.* **CHI'25**. doi:10.1145/3706598.3713392

[6] Fengyuan Liu, Yishu Ji, Xin Lei, Pei-Luen Patrick Rau. **"Responses to Human and Robot Errors in Human–robot Collaboration: An fNIRS Study"**. In: *Proceedings of the International Conference on Human-Computer Interaction*. **HCII'24**. doi:10.1007/978-3-031-60913-8_19

Posters & Presentations

[7] Yishu Ji, Maria Kon, Andrew Lovett, Mark Livingston, Sangeet Khemlani, Yalong Yang, Cindy Xiong Bearfield. **"Visualizing Motion Traces Enhances Pursuit Detection in Dynamic Scenes"**. Poster presented at: *The Annual Meeting of the Cognitive Science Society*. **CogSci'25.**

Research Experience

Columbia SEA Lab - Supervisor: *Prof.Orson Xuhai Xu* **2025 – 2026**
- Establish a LLM-driven multi-agent system for mental health inference from passive sensing data [1].
- Support data analysis for a longitudinal diary study exploring use of LLM in healthcare seeking journey [3].

Gatech VisualizaXiong Lab – Supervisor: *Prof.Cindy Xiong Bearfield* **2024 – 2025**
- Conduct empirical studies to examine human perception towards approximated visualization [4], and explore the impact of dynamic visual cues in pursuit detection [7].

Tsinghua Pervasive HCI Lab – Supervisor: *Prof.Yukang Yan* **2022 – 2023**
- Designed a user study and developed a **Unity 3D**-based study platform to conduct the experiment. Developed a computational model of user's perception of inconsistency in User-Avatar movement in VR [5].

Cornell CIS Artifact Lab – Supervisor: *Prof.Jeff Rzeszotarski & Dr.Nathan Yan* **2023**
- Designed and built up tools with LLM to assist automatic data analysis and visualization.

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Teaching Experience

Graduate Teaching Assistant, CS7470, Georgia Tech — **Spring 2026, Summer 2026**

Graduate Teaching Assistant, CS6730, Georgia Tech — **Fall 2025**

Research Mentor, Georgia Tech Visualization Group — **Summer 2025**

Academic & Community Service

Reviewer, ACM CHI Conference on Human Factors in Computing Systems — **2026**

Reviewer, ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) — **2026**

Mentor, Pre-Application Mentorship Service (PAMS) Program, University of Washington — **2026**

Coordinator, School of Interactive Computing IC Buddies Program, Georgia Tech — **2025 – 2026**

Scholarship and Awards

Dora Zee Ling Endowed Fellowship, University of Washington — **2026**

Outstanding Undergraduate (Top 10%), Tsinghua University — **2024**

"December 9th" Scholarship (Top 2%, highest honor for Sophomores), Tsinghua University — **2021**

"Comprehensive Excellence" Award (Top 15%), Tsinghua University — **2023, 2022, 2021, 2020**

Skills

LLM and Conversational AI

- Agentic design and development
- Prompt Engineering

Data Analysis and Modeling

- Applied statistical analysis (R, SPSS) and data visualization (Tableau)
- Machine learning framework and algorithm (sklearn, PyTorch)

Programming Language

- Programming language (Python, C, JavaScript, HTML) and database system (SQL)
- Game engine (Unity)

Human-Centered Design and Experiment

- User study design
- Qualitative (interview, participatory etc.) and quantitative (fNIRS, etc) research methods