

ZIANG XIAO

6795 Rue Marconi Suite 401, Montreal, QC • ziangxiao5135@gmail.com • ziangxiao.com

EMPLOYMENT

Research Assistant Professor

Johns Hopkins University, Baltimore MD.

2022-23

Postdoctoral Researcher

Microsoft Research, Montreal QC.

2022-23

Assistant Professor

Johns Hopkins University, Baltimore MD.

2024-

RESEARCH SUMMARY

My research is motivated by the fundamental question of understanding humans at scale, e.g., how could we conduct robust and generalizable studies about human behavior? My goal is to enhance the human-AI interaction to expand our knowledge about ourselves. Through my research, I hope to create a more connected research community and democratize novel technologies to operationalize intuitions and curiosities about how we think and behave. I also work on other exciting topics such as information seeking, behavioral change, online spaces, and human cognitive skills. Broadly, my work lies in the intersection of human computer interaction, natural language processing, and social and personality psychology.

EDUCATION

University of Illinois at Urbana-Champaign

Ph.D in Computer Science

2016-22

Dissertation: *Seeing us through machines: Creating AI to understand humans*

Dissertation Committee: Hari Sundaram (Advisor), Karrie Karahalios (Advisor), Michelle X. Zhou, Heng Ji, and Brent W. Roberts

University of Illinois at Urbana-Champaign

B.S. with Highest Distinction in Psychology and High Distinction in Statistics & Computer Science

2012-16

Advised by Dov Cohen

PUBLICATIONS * Indicates authors contribute equally to the work.

c10. **Xiao, Z.**, Karahalios, K., and Sundaram, H. [On Chatbot-driven Informed Consent Process]. [In submission]

j7. **Xiao, Z.**, Grandison, T., Liao, V., Zhou, M., and Li, Y. [On Building AI-Powered Chatbots to Support Information Seeking during Crises]. [In submission]

c9. **Xiao***, **Z.**, Ge*, Y., Ji, H., Diesner, J., Sundaram, H., and Karahalios, K. [On A Knowledge-graph Based Approach for Follow-up Questions Generation in Conversational Survey]. [In submission]

j6. **Xiao, Z.**, Mennicken, S., Huber, B., Shonkoff, A., and Thom, J. 2021. *Let Me Ask You This: How Can a Voice Assistant Elicit Explicit User Feedback?*. Proc. ACM Human-Computer Interaction, 2, CSCW, Article 55 (CSCW '21).

j5. Vaccaro, K., **Xiao, Z.**, Hamilton, K., and Karahalios, K. 2021. *Contestbaility for Content Moderation*. Proc. ACM Human-Computer Interaction, 2, CSCW, Article 318 (CSCW '21).

j4. Goldstein, M., Froiland J., **Xiao, Z.**, Woodard, B., Tao L., and Philpott M. 2021. Application of Online Visual-Spatial Training to Increase Visual-Spatial Ability and Growth Mindset of Engineering Students. International Journal of Engineering Education (IJEE)

c8. Li, T. **Xiao, Z.**, Goldstein, M., Philpott, and Woodard, B. 2021. *Evaluating an Intelligent Sketching Feedback Tool for Scalable Spatial Visualization Skill Training*. Proc. 128th ASEE Annual Conference and Exposition (ASEE '21).

- c7. Wauck, H. Woodard, B. **Xiao, Z.**, Li, T. and Bailey, B. ,2020, *A Data-Driven, Player-Centric Approach to Evaluating Spatial Skill Training Games*. Proc. 2020 Annual Symposium on Computer-Human Interaction in Play (CHI Play '20) [**Honorable Mention**]
- c6. **Xiao, Z.**, Zhou, M., Chen, W., Yang., H., and Chi, C., 2020, *If I Hear You Correctly: Building and Evaluating Interview Chatbots with Active Listening Skills*. Proc. 2020 CHI Conference on Human Factors in Computing Systems. (CHI '20)
- j3. **Xiao, Z.**, Zhou, M., Liao, V., Mark, G. Chi, C., Chen, W., and Yang., H. 2020, *Tell Me About Yourself: Using an AI-Powered Chatbot to Conduct Conversational Surveys with Open-ended Questions*. ACM Transactions on Computer-Human Interaction (TOCHI), 27(3), 1-37.
- j2. **Xiao, Z.**, Wang, X., Ho, P., Karahalios, K. and Sundaram, H. 2019. *Should We Use an Abstract Comic Form to Persuade? Experiments with Online Charitable Donation*. Proc. ACM Human-Computer Interaction, 3, CSCW, Article 75 (CSCW '19).
- c5. **Xiao, Z.**, Zhou, M., and Fu, W. 2019. *Who Should Be My Teammates: Using A Conversational Agent to Understand Individual Difference and Help Teaming*. Proc. the 24th International Conference on Intelligent User Interfaces (IUI '19).
- j1. Gao, M.*, **Xiao, Z.***, Karahalios, K. and Fu, W. 2018. *To Label or Not to Label: The Effect of Stance and Credibility Labels on Readers' Selection and Perception of News Articles*. Proc. ACM Human-Computer Interaction, 2, CSCW, Article 55 (CSCW '18).
- c4. **Xiao, Z.**, Wauck, H., Peng, Z., Ren, H., Zhang, L., Zuo, S., Yao, Y., and Fu, W. 2018. *Cubicle: An Adaptive Educational Gaming Platform for Training Spatial Visualization Skills*. Proc. 23rd International Conference on Intelligent User Interfaces (IUI '18).
- c3. Chiu, P., Wauck, H., **Xiao, Z.**, Yao, Y., and Fu, W. 2018. *Supporting Spatial Skills Learning with Gesture-based Embodied Design*. Proc. 23rd International Conference on Intelligent User Interfaces (IUI '18).
- c2. **Xiao, Z.**, Yao, Y., Yen, C., Dey, S., Wauck, H., Leake, J., Woodard, B., Wolters, A., and Fu, W. 2017. *A Scalable Online Platform for Evaluating and Training Visuospatial Skills of Engineering Students*. Proc. 124th ASEE Annual Conference and Exposition (ASEE '17)
- c1. Wauck, H., **Xiao, Z.**, Chiu, P., and Fu, W. 2017. *Untangling the Relationship Between Spatial Skills, Game Features, and Gender in a Video Game*. Proc. 22nd International Conference on Intelligent User Interfaces (IUI '17). ACM, New York, NY, USA, 125-136

POSTER & DEMOS

- d1. Zhou, M. Chen, W. **Xiao, Z.**, Yang, H., Chi, T. and Williams, R. .2019. *Getting Virtually Personal: Chatbots Who Actively Listen to You and Infer Your Personality*. Proc. 24th International Conference on Intelligent User Interfaces Companion (IUI '19 Companion).
- p3. **Xiao, Z.**, Zuo, S., Zhao, J., Fu, W., Goldstein, M., Philpott, M., Laystorm-Woodard, J., Pool, M., Wolters, A., and Woodard, B. 2019. *Towards Understanding Interrelated Growth Mindset and Academic Participation & Performance*. Proc.126th ASEE Annual Conference and Exposition (ASEE '19). Tampa, Florida.
- p2. **Xiao, Z.**, Yao, Y., and Fu, W. 2018. *An Intelligent Educational Platform for Training Spatial Visualization Skills*. Proc. 23rd International Conference on Intelligent User Interfaces Companion (IUI '18 Companion).
- p1. **Xiao, Z.**, and Bub, K. 2016. *Longitudinal Associations between Self-Regulation and Mental Health across Early Childhood to Adolescence*” at 16th Biennial Meeting of Society for Research on Adolescence Baltimore, Md. (SRA ‘16)

INVITED TALKS

- t3. **Xiao, Z.** *Petri: An open-source infrastructure for longitudinal behavioral research in the field*. At Center for Social and Behavioral Science: Human Subjects Research Workshop. University of Illinois at Urbana-Champaign. 2021
- t2. **Xiao, Z.**, *Building Real-World Chatbot Interviewers: Lessons from a Wizard-of-Oz Field Study*. Workshop on User-Aware Conversational Agents, Los Angeles, CA, USA
- t1. **Xiao, Z.**, *A Scalable Online Platform for Evaluating and Training Visuospatial Skills of Engineering Students*. Educational

TEACHING EXPERIENCES

CS465 User Interface Design	FA16, SP17, SP18, SP19, FA20
CS225 Data Structure and Algorithms	FA19
CS416 Data Visualization	SU21
ENG 177 Spatial Visualization	FA21

GRANTS

g3. *Developing Intervention Methods that Improve Visuospatial Skills of Engineering Students*. The University of Illinois College of Engineering Strategic Instructional Innovations Program (SIIP). 2019-2021

g2. *Behavioral Decision Research—To Go*. The Social and Behavioral Sciences Research Initiative (SBSRI). 2018

g1. *Developing Intelligent Online Tools to Improve Visuospatial Skills of Engineering Students*. The University of Illinois College of Engineering Strategic Instructional Innovations Program (SIIP). 2016-2019

ACADEMIC HONORS

Teacher Ranked as Excellent	Sept 2022
Graduate College Conference Participation Awards	May 2021
Honorable Mention at CHI Play 20	Nov 2020
Harry Triandis Award	May 2016
James E. Spoor Scholarship	May 2016

SERVICES

Conference Organizing Committee: IUI 23 [Publicity Chair]

Associate Chair: CHI 21 Late Breaking Works, CSCW 21 Poster, CSCW 22, IUI 23, WWW 22

Reviewer: CHI 20-22 [Outstanding Reviews 22], CSCW 19-22, IUI 17-20, CHI PLAY 18-21, ECSCW 21, ACM Transactions on Interactive Intelligent Systems (TiiS), International Journal of Human-Computer Interaction (IJHCI), Cognitive Systems

Student Volunteer: CHI 17, CSCW 20