# ZIANG XIAO

201 N. Goodwin Ave, Urbana IL, 61801 • 217-281-2005 • ziangxiao5135@gmail.com

#### **EDUCATION**

# University of Illinois at Urbana-Champaign

2016-2022(expected)

Ph.D Candidate in Computer Science; GPA: 4.00

Co-Advised by Prof. Hari Sundaram and Prof. Karrie Karahalios

### University of Illinois at Urbana-Champaign

2012-2016

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

Advised by Prof. Dov Cohen

### RESEARCH EXPERIENCE

#### **Research Intern**

Spotify, Boston MA. Summer 2020

### Advisor: Sarah Mennicken & Jenn Thom

- Conducted need-finding study by interviewing experts in recommender systems
- Designed various voice interactions for eliciting user feedback in situ
- Designed and conducted online studies to evaluate different voice interactions in information elicitation

#### Research Intern

Juji. Inc, Saratoga CA. Summer 2018, 2019

### Advisor: Michelle X. Zhou & Huahai Yang

- Extracted sematic evidence from over 2000 real-world conversations to improve the personality inference engine.
- Built a conversation-based recommendation system for book readers.
- Built text analytic tool with symbolic and deep learning algorithm to summarize short-text conversation.
- Analyzed multiple conversation datasets to discover the relationship between human individuality and behavior.

## Research Assistant, Crowd Dynamics Lab

Computer Science Department, University of Illinois

June 2016-Present

### Advisor: Hari Sundaram

- Investigating the persuasiveness of algorithmically synthesized comic-style messages in behavior adoption.
- Studying how the persuasive messages can build upon the effect of active social role in decision-making.
- Developing and evaluating a web/mobile research platform for conducting large scale field study.

### Research Assistant, Cascade Lab

Computer Science Department, University of Illinois

Aug 2015-May 2019

### Advisor: Wai-Tat Fu

- Developed and evaluated a scalable online platform for training spatial visualization skills
- Studied how conversational agents can help student teaming in real-world educational setting
- Designed and developed an educational game "Cubicle" for spatial visualization skill training

### **PUBLICATIONS**

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*. In Proceedings of the 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. In Proceedings of the 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*. In Proceedings of 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*. In Proceedings of 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*. In Proceedings of 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*. In Proceedings of the 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. In Proceedings of the 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*. In Proceedings of the 124th 2017 ASEE Annual Conference and Exposition (ASEE '17). Columbus, Ohio.
- 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. In Proceedings of the 22nd International Conference on Intelligent User Interfaces (IUI '17). ACM, New York, NY, USA, 125-136

\*Indicates authors contribute equally to the work.

### **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*. In Proceedings of the 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*. In Proceedings of the 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*. In Proceedings of the 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)

### **ACADEMIC HONORS**

Third Prize in China Collegiate Computing Contest Mobile Application Innovation Contest	2017
Harry Triandis Award	2016
James Scholar Preble Research Award	2015 2016
James E. Spoor Scholarship	2015
James Scholar Preble Research Award	2015

# **SERVICES**

Associate Chair: CHI 2021 Late Breaking Works

Reviewer: CHI 2020-2021, CSCW 2019-2021, IUI 2017-2020, CHI PLAY 2018-2020, ACM Transactions on Interactive Intelligent

Systems (TiiS), International Journal of Human-Computer Interaction (IJHCI)

Student Volunteer: CHI 2017, CSCW 2020

Teaching Assistant: CS465 User Interface Design FA16, SP17, SP18, SP19, FA20, CS225 Data Structure and Algorithms FA19

### TECHNICAL AND RESEARCH SKILLS

**Programing Language:** Python; JavaScript; C++; HTML; MySQL **Machine Learning Tools:** R; TensorFlow; NLTK; Gensim; Pytorch

Statistics Methods: Linear Regression; Mixed Effect Model; Structural Equation Modeling; Bayesian Analysis

Research Methods: Lab/Field Experiment Design; Natural Language Processing and Generation; Interview; Participatory Design Workshop