

Tian Linger Xu

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EMPLOYMENT

Postdoctoral Fellow 2018-present
Indiana University, Bloomington, IN
Department of Psychological and Brain Sciences
Advisors: Linda B. Smith & Chen Yu

EDUCATION

Dual Ph.D. in Computer Science and Cognitive Science 2018
Indiana University, Bloomington, IN
School of Informatics, Computing, and Engineering
Dissertation Committee: Chen Yu, David Crandall, Linda B. Smith, & Selma Šabanović

M.S. in Computer Science 2012
Indiana University, Bloomington, IN
School of Informatics, Computing, and Engineering

B.E. in Software Engineering 2009
Nanjing University, Nanjing, China
Software Institute

RESEARCH GRANTS

NICHD Training Program in Integrative Developmental Processes (T32) 2018

PUBLICATION

- **Xu, T.L.**, Abney, D.H. & Yu, C. (2017). Discovering Multicausality in the Development of Coordinated Behavior. *Proceedings of the 39th Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
- Yuan L., **Xu, T.L.**, Yu, C. & Smith, L.B. (2017). Sustained Visual Attention Is More Than Seeing. Submitted to *Journal of Experimental Child Psychology*.
- Yuan L., **Xu, T.L.**, Yu, C. & Smith, L.B. (2017). Seeing Is Not Enough for Sustained Visual Attention. *Proceedings of the 39th Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
- **Xu, T.** & Yu, C. (2016) Quantifying Joint Activities using Cross-Recurrence Block Representation. Papafragou, A., Grodner, D., Mirman, D., & Trueswell, J.C. (Eds.) *Proceedings of the 38th Annual Meeting of the Cognitive Science Society*, (pp. 1997-2002). Austin, TX: Cognitive Science Society.
- **Xu, T.L.**, Zhang, H. & Yu, C. (2016). See You See Me: The Role of Eye Contact in Multimodal Human-Robot Interaction. *ACM Transactions on Interactive Intelligent Systems*, 6(1), 2.
- Yu, C., **Xu, T.**, Zhong, Y. & Zhang, H. (2014). Learning to interact and interacting to learn: Active statistical learning in human-robot interaction. In *Neural Networks (IJCNN), 2014 International Joint Conference on* (pp. 684-691). IEEE.

- **Xu, T.**, Zhang, H., & Yu, C. (2013). Cooperative gazing behaviors in human multi-robot interaction. *Interaction Studies*, 14(3), 390-418.
- Yu, C., Yurovsky, D. & **Xu, T.L.** (2012). Visual Data Mining: An Exploratory Approach to Analyzing Temporal Patterns of Eye Movements. *Infancy*, 17(1), 33-60.
- **Xu, T.**, Yu, C. & Smith, L.B. (2011). It's the Child's Body: The Role of Toddler and Parent in Selecting Toddler's Visual Experience. In *Proceedings of IEEE 10th International Conference in Development and Learning and Epigenetic Robotics (ICDL-EpiRob 2011)*.

INVITED TALKS AND ORGANIZED WORKSHOPS

- **Xu, T.L.**, de Barbaro, K. & Cox, R.F.A. (July 2018). Finding Structure in Time. *The 21st International Congress of Infant Studies*. Philadelphia, PA, USA.
- **Xu, T.L.**, Abney, D.H. Smith, L.B. & Yu, C. (July 2018). New Technology Leads to New Discoveries: A Case Study of Using Computational Algorithms to Understand Parent-Infant Interaction. *The 21st International Congress of Infant Studies*. Philadelphia, PA, USA.
- **Xu, T.L.**, Abney, D.H. & Yu, C. (July 2017). Discovering Multicausality in the Development of Coordinated Behavior. *The 39th Annual Meeting of the Cognitive Science Society*. London, England, UK.
- **Xu, T.L.**, (May 2017) Investigating Social Contingencies and Temporal Patterns in Multimodal Coordinated Behaviors. *Cognitive Interaction Technology Workshop*. Bloomington, IN, USA.
- **Xu, T.L.** & Yu, C. (August 2016). Quantifying Joint Activities using Cross Recurrence Block Representation. *The 38th Annual Meeting of the Cognitive Science Society*. Philadelphia, PA, USA.

POSTER PRESENTATION

- **Xu, T.** Abney, D.H. and Yu, C. (2017). Quantifying the Dynamics of Real-Time Coordinated Attention with Cross Recurrence Block Quantification Analysis at *Workshop on Egocentric Vision: from Science to Real-World Applications*. Bloomington, IN, USA.
- **Xu, T.** and Yu, C. (2015). Quantifying Coupled Behavior in Social Interaction using Cross-Recurrence Quantification Analysis at *Mechanisms of learning in social contexts, ICDL-EPIROB*. Providence, Road Island, USA.
- **Xu, T.**, Zhang, H. and Yu, C. (2013). Cooperative Gazing Behaviors in Multi-Robot Human Interaction at *Summer School on Social Human-Robot Interaction*. Cambridge, England, UK.
- Boyer, T. W., **Xu, T.**, Yu, C., & Bertenthal, B. I. (2012). Infants' Visual Attention While Viewing Naturalistic Actions. Poster presentation at *Vision Science Society Conference*. Tampa, FL, USA.
- **Xu, T.**, Yu, C. (2011) Dynamic Attention Shifting in Natural Human-Human Interaction. Poster presentation at *Vision Science Society Conference*. Tampa, FL, USA.

ACADEMIC HONORS AND AWARDS

- The International Congress of Infant Studies (ICIS) Graduate Student Travel Award, Philadelphia, PA, U.S. 2018
- The IUB Provost's Travel Award for Women in Science, Bloomington, IN, U.S. 2017
- The Robert J. Glushko and Pamela Samuelson Foundation Student Travel Award, London, England, U.K. 2017

- The Robert J. Glushko and Pamela Samuelson Foundation Student Travel Award, Philadelphia, PA, U.S. 2016
- Best Poster Award, Summer School on Social Human-Robot Interaction, Cambridge, England, U.K. 2013
- Outstanding Graduates, Nanjing University (Top 5% Students), Nanjing, China 2009
- 1st Place, 2008 Programming Competition, Software Institute, Nanjing University, Nanjing, China 2008
- Visiting Student Travel Grant, Department of Computer Science, National Tsing Hua University, Hsinchu, Taiwan 2008
- First Degree (Top 5% Students), People's Scholarship of Nanjing University, Nanjing, China 2006

TEACHING

Guest Lecturer, Indiana University

- P657 Machine Learning in Cognitive Science SPRING 2017

Associate Instructor, Indiana University

- B649 Cloud Computing SPRING 2015
- B649 Cloud Computing SPRING 2014
- B555 Machine Learning SPRING 2013
- B461 Database Concepts SPRING 2012
- B565 Data Mining SPRING 2011
- A348/B548 Mastering the World Wide Web SPRING 2010
- A201 Introduction to Programming in Python FALL 2010, SUMMER 2010, FALL 2009