

# Tian Linger Xu

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## RESEARCH INTEREST

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Interpersonal Coordination; Cognitive Development; Computational Cognitive Modelling;  
Temporal Data Mining and Visualization; Cross Recurrence Quantification Analysis; Granger Causality;  
Developmental Robotics; Human Robot Interaction.

## EDUCATION

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SCHOOL OF INFORMATICS AND COMPUTING, INDIANA UNIVERSITY BLOOMINGTON	INDIANA, U.S.
<b>Ph.D. in Computer Science, present</b>	
COGNITIVE SCIENCE, INDIANA UNIVERSITY BLOOMINGTON	INDIANA, U.S.
<b>Ph.D. in Cognitive Science, present</b>	
SCHOOL OF INFORMATICS AND COMPUTING, INDIANA UNIVERSITY BLOOMINGTON	INDIANA, U.S.
<b>Master in Computer Science, Dec. 2012</b>	
SOFTWARE INSTITUTE, NANJING UNIVERSITY	NANJING, CHINA
<b>B.E. Software Engineering, Jun. 2009</b>	

## PUBLICATION

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- **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). 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)*.

## ORAL PRESENTATION

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- **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

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- **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.
- Yu, C., Smith, L., Fricker, D., Favata, A., **Xu, T.** (2011). Where Does Visual Joint Attention Come From: A Dual Head Mounted Eye Tracking Study in Child-Parent Interaction. 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.

## TEACHING

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### Guest Lecturer, Indiana University Bloomington

- P657 Machine Learning in Cognitive Science SPRING 2017

### Associate Instructor, Indiana University Bloomington

- 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

## HONORS AND AWARDS

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- The IUB Provost's Travel Award for Women in Science, Bloomington, IN, USA AUG.2017
- The Robert J. Glushko and Pamela Samuelson Foundation Student Travel Award, London, England, UK JUL.2017
- The Robert J. Glushko and Pamela Samuelson Foundation Student Travel Award, Philadelphia, PA, USA AUG.2016
- Best Poster Award, Summer School on Social Human-Robot Interaction, Cambridge, England, UK AUG.2013
- Outstanding Graduates, Nanjing University (Top 5% Students), Nanjing, China JUN.2009
- 1st Place, 2008 Programming Competition, Software Institute, Nanjing University, Nanjing, China MAR.2008
- Visiting Student Travel Grant, Department of Computer Science, National Tsing Hua University, Hsinchu, Taiwan SPRING, 2008
- First Degree (Top 5% Students), People's Scholarship of Nanjing University, Nanjing, China NOV.2006