Xintian Tu, Ph.D., PMP®

Postdoctoral Associate
Institute for Learning Sciences, University at Buffalo
Email: xintiant@buffalo.edu
Website: www.tuxintian.com

WORK EXPERIENCE

2024- Present Postdoctoral Associate | **University at Buffalo**
- Conduct interdisciplinary research on AI-enhanced learning and assessment, contributing to NSF- and IES-funded projects through study design, data collection and analysis, and scholarly dissemination.

2016- 2024 Graduate Research Assistant | **Indiana University**
- Supported large-scale, externally funded research in learning sciences by coordinating multi-site studies, conducting mixed-methods analysis, and contributing to publications, grant proposals, and project reporting.

2020-2022 Associate Instructor **| Indiana University**
- Independently taught required undergraduate courses for Early Childhood Education majors while supporting instructional coordination, student learning, and onboarding of new associate instructors.

2014-2016 Graduate Research Assistant **| Miami University**
- Managed grant-funded research activities focused on early childhood and community-based programs, coordinating data collection with Head Start partners and mentoring undergraduate researchers.

EDUCATION

Indiana University, Bloomington, IN | ***Ph.D. in Learning & Developmental Science***
Major: Learning Sciences
Minor: Inquiry Methodology
Dissertation: Supporting young children's science modeling practices through embodied activities within an MR environment.
Committee: Dr. Joshua Danish, Dr. Cindy Hmelo-Silver, Dr. Jessica Lester, & Dr. Adam Maltese

Miami University, Oxford, OH | ***Master of Education***
Major: Educational Psychology
Graduate Certificate: Human Brain and Learning
Professional Development in Assessment and Evaluation
Thesis: The effects of video games on 6 - 12 years old children's science learning

Dalian Maritime University, Liaoning, China | ***Bachelor of Economics***
Major: Economics

CERTIFICATE

Project Management Professional (PMP®) **2026**

Project Management Institute

Educational Data Mining **2023**

Carnegie Mellon University, Learn Lab Summer School

Licensed Counseling Psychologist, Level 3 **2014**

Ministry of Human Resources of the People's Republic of China

SELECTED RESEARCH PROJECT

2025-Present **AI Avatar Study**
Funding: NSF
PI: Jinjun Xiong, AI for Exceptional Education, University at Buffalo.
Focus: Understanding young children's perception of AI generated avatar through laddering interview.
Role: Leading design laddering interview for young children, data collection and data analysis.

2024-Present **Center for Early Literacy and Responsible AI (CELaRAI)**
Funding: IES
Co-PIs: Christine Wang, Chris Hoadley, Jinjun Xiong, Sanmi Koyejo, John Strong, Laura Tortorelli, Abeer Alwan, Dilek Hakkani Tur, Jaekyung Lee.
Focus: Better understand plausible and optimal contexts for generative AI use in early literacy, and teachers' AI uses and perspectives; and use this information to inform AIRE development
Role: Lead HCI user study and interview design. Facilitate data collection and provide technology support.

2022-2024 **Representations for Teachers as Learners (RepTaL)**
Funding: James McDonnell Foundation.
Co-PIs: Joshua Danish, Noel Enyedy, Cindy Hmelo-Silver, Meredith Park Rogers, Dionne Cross Francis, Robert Goldstone, & Jose Felipe Martinez
Focus: Understanding how elementary teachers think about representations as part of their science teaching.
Role: Leading data analysis and publication efforts. Facilitating data collection.
Link: http://theraptlab.org/projects/RepTal

2020-2024 **Generalized Embodied Modeling- Science through Technology Enhanced Play (GEM-STEP)**
Funding: National Science Foundation. No.1908632 & 1908791
Co-PIs: Joshua Danish, Noel Enyedy & Corey Brady
Focus: Exploring how youth learn within mixed reality (MR) environments by attending to both their individual embodied experience, and their social, collective experience of coordinating their movement as they explore the computer system.
Role: Supporting grant writing. Designing curriculum and MR environment. Collecting and analyzing data. Preparing publications.
Link: https://embodiedplay.org/

2019 **Engaging Chinese Migrant Girls in STEAM Learning through E-textile Workshop**
Funding: Martha and H.A.R Tilaar Faculty Support Fund, Indiana University
PI: Adam Maltese
Focus: Designing affordable learning activities to empower Asian-Pacific women in STEM education
Role: Co-author of the grant. Student PI. Designing workshop. Collecting and analyzing video data.

2016-2020 **Interactive Science through Technology Enhanced Play (iSTEP)**
Funding: National Science Foundation. No. 1628918
PI: Joshua Danish & Noel Enyedy
Focus: Understanding young children's science learning with different types of interactive tracking technology
Role: Designing curriculum and assessment. Collecting and analyzing data.

2016-2017 **Promoting Learning through Annotation of Embodiment (PLAE)**
Funding: National Science Foundation No. 1522945
PI: Joshua Danish & Noel Enyedy
Focus: Supporting young children's embodied learning within MR environment with annotation tools
Role: Designing curriculum and assessment. Collecting and analyzing data.

GRANTS

2024 **DEFT-AI: Digital Education for Fraud Training using Artificial Intelligent – A Safety Program for Children and Elderly.**
Funding: Google Academic Research Award (GARA)
Co-author with Dr. Lingfei Luan, Senior Group Member (Submitted, Rejected)

2021 **Collaborative Research: Collaboration Reviewer: Supporting Collaborative Learning in Immersive Science**
Environments Using Scalable AI-Driven Content Delivery Data Visualization
Funding:RETTL
Co-author (Not Funded) with Dr. Joshua Danish

2020 **Generalized embodied Modeling- Science through Technology Enhanced Play (GEM-STEP)**
Funding:National Science Foundation. No.1908632 & 1908791
Co-PIs: Joshua Danish, Noel Enyedy & Corey Brady
Co-author of the application

2019 **Engaging Chinese Migrant Girls in STEAM through E-textile Workshop**
Funding:Martha and H.A.R Tilaar Faculty Support Fund, Indiana University
Student PI (Funded)

HONORS AND AWARDS – Academic Society

2024 **Mentor Program,** American Educational Research Association (AERA) SIG ATL/LS, 2024 Cohort

2023 **Visiting Future Faculty Program (VITAL),** University at Buffalo
2023 Fall cohort, Awardee
$1000 Awarded-Declined

2023 **Emerging Scholars Symposium,** East Carolina University
2023 Fall cohort

2023 **Naomi Miyake Outstanding Student Paper,** International Conference of Learning Sciences (ICLS)
Co-author

2023 **Travel Awards for Emerging Scholars,** ACM Interaction Design and Children (IDC) Conference
$250

2022	**Best Student Paper,** American Educational Research Association (AERA) SIG ATL/LS, co-author with Sarah Lee
2021	**Doctoral Consortium,** International Society of Learning Sciences (ISLS) Awardee
2019	**Nominee of Best Design Paper,** the 13th International Conference on Computer Supported Collaborative Learning. (CSCL) Lyon, France. Lead author

PUBLICATIONS

Journal Articles – Peer Reviewed

Tu, X., & Danish, J.A. (2026) Embodied Modeling and Ecological System Exploration in a Mixed Reality Environment for Young Children. *Information and Learning Sciences.*

Li,Z., Curtis, B., Zheng, X., Feng, C., & **Tu-Shea, X.** (2026). Investigating Self-Directed Learning in Adult Tango Dancers: The Strategies to Pursue Passion. *Adult Education Quarterly*

Quan, S., **Tu-Shea, X.**, Ding, Y., Du, Y., Zheng, Q., & Gerdich, L. (2025). Exploring a conversational AI system in supporting children's literacy learning at home. *Computers & Education: Artificial Intelligence.*

Du, Y., Tang, Y., Fong, K. K., Liu, Y., Wang, D., **Tu-Shea, X.**, ... & Sheng, L (2026). A Citizen Science Approach Towards Parents-Administered Remote Language Assessment for Bilingual Mandarin-English Children: An Evaluation of In-Person and Telehealth Settings. In Frontiers in Education (Vol. 10, p. 1696031). Frontiers.

Lin, X., Luan L., **Tu-Shea, X.,** & Dai, Y. (2025) Adult Education Dilemmas: A Preliminary Study Exploring Major Challenges Through Linguistic Analysis. *The International Journal of Bias, Identity and Diversities in Education.*

Lee, S., **Tu, X.,** Adebola, S., Keifert, D., Danish, J., & Enyedy, N. (2025). How Children Blend Feedback in a Mixed-Reality Environment for Collective Embodied Learning. *International Journal of Computer Supported Collaborative Learning.*

Humburg, M., Danish, J. A., **Tu, X.,** Georgen, C., Davis, B., Enyedy, N. (2025). Using scientific annotation tools to support collaborative embodied learning in elementary school classrooms. *Journal of Science Education and Technology.*

Tu, X., Danish, J., Humburg, M., Zhou, M., Mathayas, N., Enyedy, N., & Jen, T. (2023). Understanding young children's science learning through embodied communication within an MR environment. *International Journal of Computer Supported Collaborative Learning.*

Danish, J., Anton, G., Mathayas, N., Jen, T., Vickery, M., Lee, S., **Tu, X.,** Cosic, L., Zhou, M., Dim, E., Steinberg, S., Enyedy, N., & Ryan Z. (2022). Designing for Shifting Learning Activities. Journal of Applied Instructional Design

Tu, X., Georgen, C., Danish, J., & Enyedy, N. (2021). Elementary students learning science in a MR environment by constructing liminal blends through action on props. *Information and Learning Sciences.*

Davis, B., **Tu, X.,** Georgen, C., Danish, J. A., & Enyedy, N. (2019). The impact of different play activity designs on students' embodied learning. *Information and Learning Sciences*.

Tu, X. & Lee, L (2019) Helping children from low-income family learning science with digital media: A case study of using iPad in Mid-western preschool in U.S. *Zao Qi Jiao Yu (Early Education)*

Lee, L. & **Tu, X.** (2016). Integrating Digital Media as an Effective Science Learning Tool for Low-Income Preschoolers: iPad Instruction with a Social Development Approach. *Journal of Research in Childhood Education.*

Lee, L. & **Tu, X.** (2016). Mathematical learning with digital media for low-income preschool children: A case study of ELL and non-ELL. *International Journal of Early Childhood Learning.*

Conference Proceedings – Peer Reviewed

Cai, Z., **Tu-Shea, X.**, & Thompson, N. (2026). Partnering with different Communities in STEAM learning: Culturally Responsive E-Textile Learning for Expression. *International Conference of the Learning Sciences 2026.*

Tu-Shea, X., Hoadley, C., Zheng, Q., & Xiong, J. (2026). Incorporating young children's values through laddering methodology: Examples from early literacy and AI. *International Conference of the Learning Sciences 2026.*

Tu, X., Liu, Y., Zheng, Q., Quan, S., Du, Y., & Xiong, J. (2025). Understanding Parent-Child Interaction to Enhance Bilingual Young Children's Online Language Assessment Experience. AECT International Convention 2025, Las Vegas, October 20-24.

Cai, Z., **Tu, X.**, Wang, X.C., Dantu, K., & Sadeghi, S. (2025). Exploring Preschoolers' Engagement with Intelligent Agents (IA) Mediated by IA Features and Teacher Scaffolding.

Tu, X., Lin, X., & Luan, L. (2025) Understanding Chinese Students' Online Learning Experiences: A Rasch Model Approach. Annual Conference of Society for Information Technology & Teacher Education (SITE), Orlando, Florida, March 17-21, 2025.

Tu, X., Danish, J., Ryan, Z., Vickery, M., Park Rogers, M., Hmelo-Silver, C., & Phillips, A. (2024). Teaching with Representations: How Teachers' Perception Shift Their Science Teaching. *International Conference of the Learning Sciences 2024.*

Tu, X., & Danish, J. (2023). Designing Technology-enhanced Play Environment for Young Children's Science Modeling Practice. Learning, Design and Technology Symposium, LDT'23, Evanston, IL, U.S.A.

Humburg, M., Bell, A., Keifert, D, T., **Tu, X.**, Hmelo-Silver, C., Danish, A., Lee, S., Henrie, A., Park Rogers, M., Francis, D., & Enyedy, N. (2023). Learning to be a science teacher: The worries, joys, and vulnerabilities of exploring new pedagogies. *International Conference of the Learning Sciences 2023.* **(Naomi Miyake Outstanding Student Paper Award)**

Tu, X. (2022). Supporting Young Children's Science Modeling Practice within an MR Environment. *Learning Sciences Graduate Students Conference.*

Tu, X., Humburg, M., Mathayas, N., Zhou, M., & Danish, J. (2022). How embodiment helps students explain their ideas within an MR environment and content interviews [paper]. *International Conference of the Learning Sciences 2022. Volume ICLS Proceedings, 1225-1228,* Hiroshima, Japan (Online): International Society of the Learning Sciences.

Tu, X., Yang, J., Zhong, Q., Wang, C., & Maltese, A. (2022). E-textile Fashion: Designing Maker Activity for Chinese Migrant Girls [poster]. *International Conference of the Learning Sciences 2022. Volume ICLS Proceedings, 2130-2031,* Hiroshima, Japan (Online): International Society of the Learning Sciences.

Lee, S., **Tu, X.**, Adebola, S., Danish, J., & Enyedy, N. (2022). "We Made Liquid!": How Children Blend Feedback in a Mixed-Reality Environment for Collective Embodied Learning [paper]. *International Conference of the Learning Sciences 2022. Volume CSCL Proceedings, 219-215,* Hiroshima, Japan (Online): International Society of the Learning Sciences.

Mathayas, N., **Tu, X.**, Danish, J., Vogelstein, L., & Cosic, L. (2022). Building meaningful participation using embodied Mixed Reality technologies. *International Conference of the Learning Sciences 2022.*

Zhou, M., Vickery, M., & **Tu, X.,** (2021). An exploratory literature review on collective embodied activity and funds of knowledge. *Learning Sciences Graduate Students Conference.*

Tu, X., (2021). Using embodied play to support young children's understanding of science modeling**.** *International Conference of the Learning Sciences (ICLS) 2021.* ***(Paper for Doctoral Consortium)***

Mathayas, N., Danish, J., **Tu, X.,** Zhou, M., & Vickery, M. (2021). Social positioning in collective embodied models in an elementary STEM classroom. Paper presented in symposium: Movement, Authority, and Knowledge: Examining the Relationships in Embodied and Social Positioning for STEM Learning. *In de Vries, E., Hod, Y., & Ahn, J. (Eds.), Proceedings of the 15th International Conference of the Learning Sciences (pp. 843-850).* Bochum, Germany: International Society of the Learning Sciences.

Vickery, M., Danish, J., **Tu, X.,** & Zhou, M. (2021). Scientific Modeling Practices Through Perspective Taking in a Mixed Reality Embodied Learning Environment. In *Proceedings of the 15th International Conference of the Learning Sciences-ICLS 2021.* International Society of the Learning Sciences.

Tu, X., Georgen, C., Danish, J., & Enyedy, N (2020). Extended Embodiment: Physical and Conceptual Tools in a Mixed-Reality Learning Environment as Supports for Young Learners' Exploration of Science Concepts. In Gresalfi, M. and Horn, I. S. (Eds.). (2020). *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020, Volume 3, 1269-1276.* Nashville, Tennessee: International Society of the Learning Sciences.

Tu, X., Danish, J., Humburg, M., Enyedy, N., & Keifert, D., (2020). Play and Embodiment: Designing for early elementary students' strengths. In symposium: Broadening Learning Sciences Theoretical lenses to understand young children's sensemaking. In Gresalfi, M. and Horn, I. S. (Eds.). (2020). *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020, Volume 1,* 390-397. Nashville, Tennessee: International Society of the Learning Sciences.

Davis, B., **Tu, X.,** Humburg, M., & Georgen, C. (2019). An analysis of guided play activities as supplemental tools for embodied science learning. *Learning Sciences Graduate Students Conference.* Evanston, IL.

Humburg, M., **Tu,X.,** Davis, B., Georgen, C., & Ryan, Z. (2019). Designing for exploration in elementary science: how the ordering of embodied activities can impact students' investigations of scientific mechanisms. *Learning Sciences Graduate Students Conference.* Evanston, IL.

Tu, X., Ryan, Z., Humburg, M., Davis, B., Georgen, C., & Danish, J. (2019). Exploring young children's uses of props in science inquiry activities. *Learning Sciences Graduate Students Conferences.* Evanston, IL

Tu, X., Danish, J., Georgen, C., Humburg, M., Davis, B., & Enyedy, N (2019). Examining how scientific modeling emerges through collective embodied play. In Lund, K., Niccolai., G., Lavoue, E., Hmelo-Silver, C., Gwen, G., & Baker, M., (Ed.), A Wide Lens: Combing Embodied, Enactive, Extended and Embedded Learning in Collaborative Settings: The 13th International Conference on Computer Supported Collaborative Learning (Vol. 2.). Lyon, France: The International Society of the Learning Sciences. **(Nominee of Best Design Paper Award)**

Danish, J., Enyedy, N., Humburg, M., Davis, B., & **Tu, X.** (2019). Collective embodied activity and how different concepts map to social exploration. In Lund, K., Niccolai., G., Lavoue, E., Hmelo-Silver, C., Gwen, G., & Baker, M., (Ed.), A Wide Lens: Combing Embodied, Enactive, Extended and Embedded Learning in Collaborative Settings: The 13th International Conference on Computer Supported Collaborative Learning (Vol. 2.). Lyon, France: The International Society of the Learning Sciences.

Davis, B., **Tu, X.,** Danish, J., & Enyedy, N. (2018). The Structures of Embodied Play Activities and Their Impact on Students' Exploration of the Particulate Nature of Matter. In Kay, J. and Luckin, R. (Eds.) Rethinking Learning in the Digital Age: Making the Learning Sciences Count, *13th International Conference of the Learning Sciences (ICLS)* 2018, Volume 3. London, UK: International Society of the Learning Sciences.

Tu, X., Humburg, M., Davis, B., & Danish, J. (2017). Pre-made vs freeform annotation tools: Benefits and drawbacks of constraining students' scientific observation. *Learning Sciences Graduate Students Conference.* Bloomington, IN.

Davis, B., **Tu, X.,** Danish, J., & Enyedy, N (2017). The Impact of Play, Gesture, and Teacher Prompts on Student Explanations About the Particulate Nature of Matter. *Computer Supported Collaborative Learning (CSCL)* Annual Meeting, Philadelphia, PA, June 18-21, 2017.

Tu, X. & Lee, L. (2016). Enhancing Young Children's Learning of Science with iPads. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2016* (pp. 1348-1355). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Book Chapter

Tu,X., (Forthcoming). Embodied Modeling in Mixed Reality: Expanding Young Learners' Science Practices Through Perspective-Taking.

Yang, J., **Tu, X.,** Kim, J., & Maltese, A. (2021). "Making with Children in Three Different Cultures: China, South Korea, and the U.S.A", a chapter in the book*, World of Children: Perspectives and Connections in Sustainability during the Pandemic*, edited by Judith Lynne McConnell-Farmer (Mikkelson), Ed.D.

Invited Talk

Tu, X. (Nov. 2025). Designing the Future of Learning: Understanding Young Children's Learning with Technology. SUNY Cortland.

Tu, X. (Oct. 2024). Designing the Future of Learning: Collective Embodied Play in Mixed Reality for Young Children. *Institute for Learning Sciences Speaker Series,* Institute for Learning Sciences, University at Buffalo.

Hoadley, C., **Tu, X., &** Kearney, E. (Sep 2023). New Ways to Interact with AI: Virtual, Augmented and Mixed Reality. *AI + Education Learning Community Series,* Graduate School of Education, University at Buffalo.

Tu, X. (Sep. 2024) Learn with your body: Research in Learning Sciences. Guest Speaker for Graduate course LAI615 Intro to Curriculum, Instruction, and Science of Learning (CISL). University at Buffalo.

Tu, X. (Nov 2023). Designing the Technology-enhanced Environment for Next-Generation. *Emerging Scholars Symposium,* East Carolina University.

Conference Presentations

Liu, Y., **Tu, X.,** Zheng, Q., Quan, S., Fong, K., Luo, G., Xiong, J., Sheng, L., & Du, Y.**(2025).** Examining Parental Behaviors Across Languages During a Telehealth Mandarin-English Receptive Language Screener (MERLS)**.** *American Speech-Language-Hearing Association (ASHA), Washington, D.C.*

Tu, X., (2025). Embodied Learning as Collect Experience for Young Children's Science Learning. *Annual conference of the American Educational Research Associatio*n *(AERA)*, Denver, Colorado

Tu, X., & Wang, C (2025). Role of Facilitation in Enhancing Young Children's Learning within an MR Environment. *Annual conference of the American Educational Research Associatio*n *(AERA)*, Denver, Colorado

Tu, X., (2024). Understanding How Roles Mediate Young Children's Science Learning within an Embodied Mixed Reality Environment. *Annual conference of the American Educational Research Associatio*n *(AERA)*, Philadelphia, Pennsylvania

Tu, X., Danish, J., Ryan, Z., Vickery, A., Hmelo-Silver, C., & Park Rogers, M., (2024). Teaching with Representations: Elementary Teachers' Perceptions. *Annual conference of the American Educational Research Associatio*n *(AERA)*, Philadelphia, Pennsylvania

Mathayas, N., Zhou, M., Danish, J., Vickery, M., Steinberg, S., Ryan Z., **Tu, X.,** & Devine, I., (2024). The Role of Embodied Modeling on Fifth Grade Students' Perspectives on Ecosystems Thinking and Metamodeling. *Annual conference of the American Educational Research Associatio*n *(AERA)*, Philadelphia, Pennsylvania

Tu, X., Danish, J., Humburg, M., Hmelo-Silver, C., Park Rogers, M., Bell, A., & Lee, S. (2023). Understanding Teachers' Perceptions of Representations in Elementary Science Classrooms, *The Biennial Conference of European Association for Research on Learning and Instruction (EARLI),* Thessaloniki, Greece.

Tu, X., & Danish, J. (2023). From play to science modeling: Young Children Learning Pollination in an MR Environment. *Annual conference of the American Educational Research Associatio*n *(AERA),* Chicago, IL.

Tu, X., Danish, J., Humburg, M., Hmelo-Silver, C., Park Rogers, M., Bell, A., & Lee, S. (2023). Understanding teachers' perceptions of representations in elementary science education. *Annual conference of the American Educational Research Associatio*n *(AERA)*, Chicago, IL.

Humburg, M., Bell, A., **Tu, X.,** Danish, J., Keifert, D., Hmelo-Silver, C., Henrie, A., Park Rogers, M., Enyedy. (2023) "Sounds Very Joyful to Me": Emotional Engagement and Social Support in Teacher Professional Development. Paper accepted at the *Annual conference of the American Educational Research Associatio*n, Chicago, IL.

Tu, X., Danish, J., Enyedy, N., Ryan, Z., Jen, Tessaly., Vickery, M., Zhou, M. (2022). Breaking the 4th Dimension of Science Assessment: Role of Embodied Experience. Paper presented in symposium: Technologies for Situated, Grounded, Embodied Learning: The Unique Role of Extended Reality Experiences at the *Annual conference of the American Educational Research Associatio*n, San Diego, CA.

Lee, S., **Tu, X.,** Adebola, S., Danish, J., & Enyedy, N. (2022). Collective Feedback Students, Teachers, and Technology Working Together to Make Sense of States of Matter. Paper presented at the *Annual conference of the American Educational Research Associatio*n, San Diego, CA. **(SIG ATL/LS Best Student Paper)**

Zhou, M., Vickery, M., Danish, J., **Tu, X., &** Ryan, Z. (2022). The Role of Body in Goal Negotiation and Adoption During a Collective Modeling Activity. Paper presented at the *Annual conference of the American Educational Research Associatio*n, San Diego, CA.

Ryan, Z., Danish, J., **Tu, X.,** Davis, B., Zhou, M., & Vickery, M. (2022). Designing for Broadening Participation in an Embodied Learning Environment**.** Paper presented in symposium: Designing for Dignity Affirming Experiences: Leveraging Embodied Learning Toward Equity in Interaction at the *Annual conference of the American Educational Research Associatio*n, San Diego, CA.

Tu, X., Humburg, M., Danish, J., Davis, B., Ryan, Z., Vickery, M., Zhou, M., & Mathayas, N. (2021). Assessing young children's embodied learning of states of matter in a Mixed-Reality environment. Paper presented at the *Annual conference of the American Educational Research Associatio*n, Online.

Tu,X., Danish, J., Georgen, C., Humburg, M., & Enyedy, N. (2019). Play, Modeling, and Play-as-Modeling in early elementary science. Poster presented at the *Annual conference of the American Educational Research Associatio*n, Toronto, Canada.

Humburg, M., **Tu, X**., Danish, J., Georgen, C., Davis, B., & Enyedy, N. (2019). Comparing Young Students' Uses of Scientific Annotation Tools for Observing Peers' Embodiment. Poster presented at the *Annual conference of the American Educational Research Associatio*n, Toronto, Canada.

Humburg, M., **Tu, X.,** Davis, B. (2018). Designing for innovative uses of embodiment in learning. Workshop organized at the *Learning Sciences Graduate Students Conferences.* Nashville, TN.

Humburg, M., Keifert, D., Georgen, C., Lee, C., **Tu, X.**, Danish, J., & Enyedy, N. (2018). The challenge of consistency in sensemaking resources across play and assessment for young science learners. Paper presented at the Annual conference of the American Educational Research Association, New York, NY.

Danish, J., Keifert, D., Enyedy, N., Humburg, M., **Tu, X.**, Davis, B., & Lee, C. (2018). Embodiment Within Computational Models: Explorations of Agency and Normativity. Paper presented at the Annual conference of the American Educational Research Association, New York, NY.

Tu, X., & Lee, L. (2015). Enhancing mathematical learning of preschool children with special needs through digital media. *Mid-West Education Research Association (MWERA) Conference,* Evanston, IL. October 21-24, 2015.

TEACHING AND MENTOR EXPERIENCE

Fall 2024, 2025	**Workshop: Interaction Analysis and Digital Software for Qualitative Research** Mentor Ph.D. students of Department of Learning and Instruction (LAI), University at Buffalo.
2021-2022	**Orientation for Associate Instructor,** Indiana University Designer and co-facilitator, Center of Innovative Teaching and Learning
2020-2022	**P251 Educational Psychology for Elementary Teachers**, Indiana University Associate Instructor, Department of Counseling and Educational Psychology
2020-2022	**M101 Field Experience,** Indiana University Associate Instructor, Department of Counseling and Educational Psychology
Spring 2021	**Workshop: Item Response Theory and Rasch Analysis** Workshop for Ph.D. students work at Center for Research in Technology and Learning (CRLT).
2019	**Chinese flagship program,** Indiana University Teaching assistant, Hamilton Lugar School of Global and International Studies

PROFESSIONAL MEMBERSHIP

American Educational Research Association (AERA)

International Society of the Learning Sciences (ISLS)

Association for Computing Machinery: SIG Computer-Human Interaction (ACM SIGCHI)

Association for the Advancement of Computing in Education (AACE)

Association for Educational Communications and Technology (AECT)

PROFESSIONAL SERVICES – Professional Society

2025 -2026	***American Educational Research Association (AERA)*** *SIG- Learning Sciences. Secretary/Treasurer*
2024- Present	***International Society of the Learning Sciences (ISLS)*** *Membership Committee*
2023-2024	***International Society of the Learning Sciences (ISLS)*** *Membership Committee- ILSSA representative* *Financial Concern Evaluation Committee- ILSSA representative*

2023-2024	***ISLS International Learning Sciences Student Association (ILSSA)*** *Membership and Outreach Chair*
2023	***ACM SIGCHI Interaction Design and Children (IDC) Conference*** *Student volunteer.*
2023	***AI Center for Integrative Research in Computing and Learning Sciences (CIRCLS)*** *Mock Review Panel* *Community member*
2019	***Learning Science Graduate Students Conference (LSGSC)*** IU representative, social media team, Reviewer

PROFESSIONAL SERVICES – Review

Journal of Education *Editorial Board*	2024- Present
Computers & Education *Reviewer*	2024
Instructional Science *Reviewer*	2023- Present
ACM- CHI Computer-Supported Cooperative Work *Reviewer*	2024
Annual Meeting of International Society of the Learning Sciences (ISLS) *Reviewer*	2020-Present
American Educational Research Association (AERA) *SIG ATL/LS, Reviewer*	2020-Present
ChatGPT and Global Higher Education: Using Artificial Intelligence in Teaching and Learning *Book chapter reviewer*	2023
STAR Scholar Books *Reviewer*	2023
Learning Sciences Graduate Students Conference (LSGSC) *Reviewer*	2018-2023
Educational Technology & Society (ET&S) *Reviewer*	2021

PROFESSIONAL SERVICES – Indiana University

2020-2022	***Center of Innovative Teaching and Learning****,* Indiana University *Facilitator for Associate Instructor Orientation*
2022	***Faculty Search Committee****,* Indiana University *Student representative*
2020	***Learning Science Graduate Students Association****,* Indiana University Vice President, Treasure
2018	***Learning Science Graduate Students Association,*** Indiana University Secretary

HONORS AND AWARDS – Graduate School

2017-2024	**CRLT Travel Scholarship**, Indiana University $300-$500
2022	**Frieda Alice Renfro Fellowship**, Indiana University $2,100
2021	**Graduate and Professional Student Government Travel Award**, Indiana University $250
2016-2020	**Counseling and Educational Psychology Department Faculty Fellowship**, Indiana University
2015	**Summer Scholarship**, Miami University $1,500

PROFESSIONAL SKILLS

Languages: R, MATLAB, JavaScript

Research software: Atlas. ti, SPSS, WINSTEPS (Rasch Model), Transana, InqScribe, MAXQDA

Media editors: Camtasia, Kaltura

Tracking system/tool: LEAP, OpenPtrack, Pozyx

LANGUAGE SKILLS

Professional fluent in English, Mandarin

Literate in Japanese