# Ji Hyun Yu

Assistant Professor in Learning Technologies
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## Education

December 2013 — **Purdue University** — West Lafayette, IN
Ph.D. in Learning Design and Technology
Dissertation: Development and Validation of Pre-service Teacher Personal Epistemologies Scale. Advisor: Dr. Peggy A. Ertmer, Dr. Timothy Newby, Dr. Johannes Strobel, Dr. Aman Yadav

July 2003 — **Ewha Womans University** — Seoul, Korea
M.A. Educational Technology
Thesis: Effects of the Toulmin Argumentation Model on Learners' Argumentation Skills in Online Discussion: The Moderating Role of Cognitive Style

February 2000 — **Ewha Womans University** — Seoul, Korea
B.A. Education, Educational Technology, Multimedia

## Employment

2023-present — **Anuradha and Vikas Sinha College of Artificial Intelligence and Advanced Analytics, University of North Texas** — Denton, TX
Assistant Professor of Learning Technologies

2016-2023 — **Center for Academic Innovation, University of Michigan** — Ann Arbor, MI
Learning Experience Design Lead, School of Social Work

2014-2016 — **School of Education, Virginia Tech** — Blacksburg, VA
Visiting Assistant Professor of Instructional Design and Technology

2003-2008 — **Human Resources Development Consulting, Samsung Multicampus** — Seoul, Korea
HR Consultant, Talent Management and Competency-Based Curriculum Development

## Non-Degree Education & Training

December 2025 — **University of Pennsylvania** — Philadelphia, PA
Data Science Methods for Digital Learning Platforms

July 2023-present — **University of Wisconsin** — Madison, WI
Quantitative Ethnography Institute Fellowship

July 2023 — **North Carolina State University** — Raleigh, NC
Learning Analytics in STEM Education Research (LASER) Fellowship

December 2022 — **Massachusetts Institute of Technology** — Cambridge, MA
Applied Data Science Program (hybrid)

## Awards & Honors

**EWHA Global Fellow 2025-2029 (Honor/Fellowship)**
Awarded the EWHA Global Fellow 2025–2029 by Ewha Womans University in Seoul, South Korea. This prestigious fellowship recognizes distinguished international scholars and supports collaborative research and educational exchange with Ewha faculty.

**UNT COI 2025 Rising Star Faculty (Award)**
Recipient of the 2025 Rising Star Faculty Award from the UNT College of Information, an honor recognizing an early-career faculty member who demonstrates exceptional promise and notable contributions to the college.

**AERA 2025 Online Teaching Learning SIG Best Paper (Award)**
Recipient of the 2025 Best Paper Award from the AERA Online Teaching and Learning SIG, which recognizes methodological innovation in research. The paper was honored for using epistemic network analysis to reveal how social and cognitive presence co-develop in online discussions.

**KSET 2025 Educational Technology International SIG Best Paper (Award)**
Recipient of the 2025 Educational Technology International SIG Best Paper Award from the Korean Society for Educational Technology (KSET). This award recognizes excellence in advancing learning analytics through the use of clustering and predictive modeling to uncover learner profiles.

**UNT 2025 Faculty Success Conference Support (Honor)**
Recipient of the UNT 2025 Faculty Success Conference Support, a competitive honor providing funding for faculty to present high-impact research at national and international conferences.

**UNT COI 2025 Supplemental Professional Travel (Honor)**
Recipient of the UNT College of Information 2025 Supplemental Professional Travel support, a competitive honor of up to $1,500 awarded in recognition of notable contributions to the field.

**UNT COI 2024 Rising Star Faculty (Award)**
Recipient of the 2024 Rising Star Faculty Award from the UNT College of Information, recognizing an early-career faculty member demonstrating exceptional promise and notable contributions within the College.

**LASER 2024 Travel Grant (Honor)**
Awarded the LASER 2024 Travel Grant of $2,500 for travel expenses in recognition of significant contributions to the field of learning analytics.

**UNT COI 2024 Supplemental Professional Travel (Honor)**
Awarded competitive supplemental funding of $1,500 from the UNT College of Information in recognition of significant scholarly contributions and to support the presentation of high-impact research.

**UNT Department of Learning Technologies Supplemental Travel Support (Honor)**
Awarded competitive supplemental funding of $500 from the UNT Department of Learning Technologies to support professional travel in recognition of notable contributions to the field.

**James T. Neubacher Award 2021 (Award)**
Awarded to the Learning Experience Design team at the University of Michigan for significant achievements in promoting equal access and opportunity for people with disabilities.

**FTTC IDEA Recognition for Instructional Design Award 2021 (Award)**
Awarded to the Learning Experience Design team for efforts in advancing equitable and inclusive approaches to design for online learning environments.

**AECT/NSF Early Career Symposium recipient 2013**
A merit-based award ($1,400) given for excellence in research to early-career faculty and advanced doctoral students.

**Research Assistantship for NSF GSE Project 2012-2013 (Position/Honor)**
Served as a Research Assistant examining engineering perceptions and identity among young girls.

**Frank B. DeBruicker Graduate Award 2012 (Award)**
A merit-based award ($1,000) given to one graduate student at Purdue University for excellence in research.

**ISPI University HPT Case Study Competition 2011 (Award)**
Received a "Top 3" award in the competition sponsored by the International Society of Performance Improvement.

**Research Assistantship in NSF VOSS Project 2010-2012 (Position/Award)**
Research role focused on transforming loose networks into sustainable interdisciplinary virtual organizations.

**AECT Design and Development Showcase Certificate 2009 (Award)**
Awarded by the Design and Development Division of the Association for Educational Communications and Technology.

**Ross Graduate Fellowship at Purdue University 2008-2012 (Fellowship)**
Awarded to outstanding Ph.D. students in the Learning Design and Technology program.

**Samsung Multicampus Best Employee Award 2005, 2006, 2007 (Award)**
Recognized for outstanding job performance within Samsung's corporate HR development division.

**National College Student Thesis Competition Winner 2000 (Award)**
Awarded by the Ministry of Education, South Korea, for research on student-centered learning practices.

## Peer-Reviewed Journal Articles

*Student co-author.

Published

1. **Yu, J. H.**, Kim, H., Dong, L.*, Hsieh, C.-J.*, Duan, S., & Watson, S. L. (2026). Linguistic patterns in reflective writing: Analyzing graduate students' professional aspirations. *Educational Technology Research and Development.* https://doi.org/10.1007/s11423-025-10561-3
2. **Yu, J. H.**, Romero, P.*, Dunlap, M.*, & Warren, S. J. (2026). Why educators use but do not endorse artificial intelligence in higher education. *Innovative Higher Education.* https://doi.org/10.1007/s10755-026-09957-7
3. **Yu, J. H.**, Tu, F.*, Chen, H., Ding, J., Hsieh, C.-J.*, Dong, L.*, Kim, H., & Watson, S. L. (2026). Measuring cognitive presence in online discussions: Automated detection and instructional insights from a MOOC context. *Educational Technology Research and Development.* https://doi.org/10.1007/s11423-026-10726-8
4. **Yu, J. H.**, Tu, F.*, Cheng, L., Li, S., & Zheng, Z. (2026). Verification without criteria: An epistemic network analysis of metacognitive laziness in generative AI research. *Online Learning.*
5. **Yu, J. H.**, Tu, F.*, & Yelamar, K. S. (2026). Structured flexibility in microcredentials: A temporal analysis of self-regulated achievement pathways. *Computers & Education.* https://doi.org/10.1016/j.compedu.2026.105624
6. Duan, S., McNary, S., Hsieh, C.-J.*, Dong, L.*, Watson, S. L., Jiang, S., Xu, F., & **Yu, J. H.** (2026). Subjective well-being trajectories in an online graduate program: A five-year multi-cohort study of course-embedded Best Possible Self activities. *Journal of American College Health,* 1–12. https://doi.org/10.1080/07448481.2026.2678239
7. Hsieh, C.-J.*, Dong, L.*, Duan, S., McNary, S. W., Watson, S. L., Jiang, S., Xu, F., & **Yu, J. H.** (2026). Sustaining subjective well-being in online graduate programs: Insights from repeated implementations of the Best Possible Self intervention. *Journal of American College Health.*

8 **Yu, J. H.**, Park, Y., & Kye, B. (2025). Identifying learner profiles and predicting performance in a digital textbook: A case study of K-8 schools in South Korea. *Educational Technology International.* https://doi.org/10.23095/ETI.2025.26.1.001 *Recipient of the Best Paper Award at the 40th Anniversary of the Korean Society for Educational Technology.*

9 **Yu, J. H.**, & Rho, J. (2025). Just seeing can be deceiving: GenAI-supported design case for critical visual literacy. *International Journal of Designs for Learning, 16*(2). https://doi.org/10.14434/ijdl.v16i2.41987

10 An, Y., **Yu, J. H.**, & James, S.* (2025). Investigating the higher education institutions' guidelines and policies regarding the use of generative AI in teaching, learning, research, and administration. *International Journal of Educational Technology in Higher Education, 22*(1), 10. https://doi.org/10.1186/s41239-025-00507-3

11 Dong, L.*, Watson, S. L., **Yu, J. H.**, & Lowell, V. (2025). Revisiting the interrelationships between social presence and cognitive presence in asynchronous online courses: Insights from epistemic network analysis. *Online Learning, 29*(3), 417–448. https://doi.org/10.24059/olj.v29i3.4672 *Recipient of the Best Paper Award of the Online Teaching and Learning SIG at the 2025 American Educational Research Association Annual Meeting.*

12 Olesova, L., **Yu, J. H.**, & Garcia, B. (2025). Integrating care ethics in GenAI-enhanced instructional design: A framework for inclusive and equitable higher education practices. *Journal of Applied Instructional Design, 14*(3). https://jaid.edtechbooks.org/jaid_14_3/pzgghjfkiq

13 **Yu, J. H.** (2024). Integrating actionable analytics into learning design for MOOCs: A design-based research. *Journal of Computing in Higher Education,* 1–39. https://doi.org/10.1007/s12528-024-09413-5

14 **Yu, J. H.**, & Chauhan, D.* (2024). Trends in NLP for personalized learning: LDA and sentiment analysis insights. *Education and Information Technologies,* 1–42. https://doi.org/10.1007/s10639-024-12988-2

15 **Yu, J. H.**, Chauhan, D.*, Iqbal, R. A.*, & Yeoh, E.* (2024). Mapping academic perspectives on AI in education: Trends, challenges, and sentiments in educational research (2018–2024). *Educational Technology Research and Development,* 1–29. https://doi.org/10.1007/s11423-024-10425-2

16 **Yu, J. H.**, Dong, L.*, Hsieh, C.-J.*, Tan, Y., Duan, S., & Watson, S. L. (2024). Instructional designers' professional futures: Insights from Best Possible Self and epistemic network analysis. *Educational Technology Research and Development.* https://doi.org/10.1007/s11423-024-10441-2

17 Duan, S., Hsieh, C.-J.*, Dong, L.*, Jiang, S., Xu, F., Watson, S. L., & **Yu, J. H.** (2024). Unveiling novice instructional designers' professional identity: Exploring dispositions through future-oriented reflections. *Higher Education.* https://doi.org/10.1007/s10734-024-01366-z

18 **Yu, J. H.** (2023). Learning experience design as collective praxis: Two design cases from higher education. *Journal of Applied Instructional Design, 12*(3), 59–83. https://doi.org/10.59668/515.12902

19 Nawaz, S., Srivastava, N., **Yu, J. H.**, Baker, R., Kennedy, G., & Bailey, J. (2022). How difficult is the task for you? *Modeling and analysis of students' task difficulty sequences in a simulation-based POE environment. International Journal of Artificial Intelligence in Education,* 1–30. https://doi.org/10.1007/s40593-021-00242-6

20 **Yu, J. H.**, & Watson, S. L. (2020). Identifying subtypes of attitudinal learning among MOOCs learners: A latent profile analysis. *Open Learning: The Journal of Open,* Distance and e-Learning. https://doi.org/10.1080/02680513.2020.1755836

21 Watson, S. L., **Yu, J. H.**, Alamri, H., & Watson, W. R. (2020). Preservice teachers' technology integration attitude change in a course implementing digital badges. *Journal of Technology and Teacher Education, 28*(1), 89–116. https://www.learntechlib.org/primary/p/211054

22 Watson, W. R., Watson, S. L., Fehrman, S. E., **Yu, J. H.**, & Janakiraman, S. (2020). Examining international students' attitudinal learning in a higher education course on cultural and language learning. *Journal of International Students, 10*(3). https://doi.org/10.32674/jis.v10i3.1083

23 Watson, S. L., Watson, W. R., **Yu, J. H.**, Caskurlu, S., Janakiraman, S., & Fiock, H. (2018). Attitudinal learning and its relation to gender, age, ethnicity, enrolment purpose, and most impactful learning activity in the science of happiness MOOC. *International Journal of Learning Technology, 13*(4), 306–326. https://doi.org/10.1504/IJLT.2018.098501

24 Watson, W. R., **Yu, J. H.**, & Watson, S. L. (2018). Perceived attitudinal learning in a self-paced versus fixed-schedule MOOC. *Educational Media International, 55*(2), 170–181. https://doi.org/10.1080/09523987.2018.1484044

25 Watson, S. L., Watson, W. R., **Yu, J. H.**, Alamri, H., & Mueller, C. (2017). Learner profiles of attitudinal learning in a MOOC: An explanatory sequential mixed-methods study. *Computers & Education, 114,* 274–285. https://doi.org/10.1016/j.compedu.2017.07.005

26 Park, Y., **Yu, J. H.**, & Jo, I. (2016). Clustering blended learning courses by online behavior data: A case study in a Korean higher education institute. *The Internet and Higher Education, 29,* 1–11. https://doi.org/10.1016/j.iheduc.2015.11.001

27 Capobianco, B. M., **Yu, J. H.**, & French, B. (2015). Effects of engineering design-based science on elementary school science students' engineering identity development across gender and grade. *Research in Science Education, 45,* 275–292. https://doi.org/10.1007/s11165-014-9422-z

28 Capobianco, B. M., & **Yu, J. H.** (2014). Using the construct of care to frame engineering as a caring profession toward promoting young girls' participation. *Journal of Women and Minorities in Science and Engineering, 20*(1), 21–33. https://doi.org/10.1615/JWomenMinorScienEng.2014006834

29 **Yu, J. H.**, Luo, Y., Sun, Y., & Strobel, J. (2012). A conceptual K-6 teacher competency model for teaching engineering. *Procedia - Social and Behavioral Sciences, 56,* 243–252. https://doi.org/10.1016/j.sbspro.2012.09.651

30 Ertmer, P. A., Newby, T. J., Liu, W., Tomory, A., & **Yu, J. H.** (2011). Students' confidence and perceived value for participating in cross-cultural wiki-based collaborations. *Educational Technology Research and Development, 59*(2), 213–228. https://doi.org/10.1007/s11423-011-9187-4

31 Ertmer, P. A., Newby, T. J., **Yu, J. H.**, Liu, W., Tomory, A., Lee, Y., Sendurur, E., & Sendurur, P. (2011). Facilitating students' global perspectives: Collaborating with international partners using Web 2.0 technologies. *The Internet and Higher Education, 14*(4), 256–261. https://doi.org/10.1016/j.iheduc.2011.05.005

## Research Platforms and Software Development

The MIRA (Metacognitive Instructional Regulation Agents) platforms are research infrastructure I designed and built to make student reasoning observable in authentic coursework, where existing assessments record only what students produce.

2026-present **MIRA-Py: Mastery-Gated Python Learning Platform**

Role: Sole architect and developer; Principal Investigator

Description: Browser-based mastery learning platform for introductory Python programming. Each task is gated by a concept check answered in the student's own words and a code check that evaluates the actual Python output. A dry run prediction is required on two tasks per assignment and is also triggered when a student pastes a block of code. This operationalizes productive friction as a runtime constraint rather than an instructional recommendation. Instrumentation captures gate attempts, paste episodes, hint requests, and repeated perception measures across a semester. The behavioral record is returned to students as a three-axis profile of Planning, Understanding, and Code Change, with Implementation Fluency shown as a separate marker, so that students interpret their own patterns rather than receive an instructor's interpretation of them.

Technical: Next.js, TypeScript, Pyodide in a sandboxed Web Worker, Supabase (PostgreSQL), Vercel. Signed completion certificates for LMS submission.

Deployment: Credit-bearing undergraduate course at the University of North Texas.

2025-present **MIRA-Agent: Metacognitive Programming Tutor**

Role: Sole architect and developer; Principal Investigator

Description: Conversational programming tutor built around Paste Intelligence, a design pattern that responds to pasted code by requiring a learner explanation of one specific token before the code can run, separating productive scaffolding from unexamined reuse. Pastes are classified rather than counted, since reusing code written earlier in the same session is not equivalent to inserting a block the student has never read.

Technical: Next.js, TypeScript, Supabase (PostgreSQL), Vercel.

Deployment: Credit-bearing undergraduate and graduate courses at the University of North Texas.

2025-present **MIRA-Sim and MIRA-Roundtable: Adversarial Argumentation Environments**

Role: Sole architect and developer; Principal Investigator

Description: Six-stage policy deliberation environment in which learners construct and defend a position against AI stakeholder agents. Stage advancement is gated on a computed Integrative Reasoning index (Breadth, Balance, Discourse), yielding behavioral traces of epistemic ownership under argumentative pressure. MIRA-Roundtable, the second environment, extends the design to live small-group debate. At a scheduled time, students join a session together and take positions on a question without a settled answer. An AI discussant argues the side the group has not taken, and a shared position map records how each student's position changes. Turns are coded with an eleven-move scheme built on Leitão (2000).

Technical: Next.js, TypeScript, Supabase (PostgreSQL), Vercel.

Deployment: Credit-bearing undergraduate and graduate courses at the University of North Texas. Findings presented at the HAI-Agency Workshop, AIED 2026. MIRA-Roundtable is in development.

2024-present **Cybernetic Sabotage: Affect-Aware SQL Learning Environment**

Role: Co-investigator and collaborating developer

Description: This platform models learners' affective states during SQL problem-solving through dynamic Bayesian networks over interaction traces, distinguishing productive confusion from frustration that precedes disengagement. It addresses the boundary condition the other platforms assume, which is when friction stops being productive. Collaboration with Northeastern University (Dr. Hazra Imran).

## Conference Presentations

1. **Yu, J. H.** (2026, July). *Defensible but not owned: Behavioral traces of epistemic ownership in an AI-mediated deliberation environment* [Workshop presentation]. HAI-Agency Workshop, International Conference on Artificial Intelligence in Education (AIED 2026). Seoul, Korea.
2. **Yu, J. H.**, Wilhoit, H. Y.*, & Tu, F.* (2026, March). *Validating new pathways to success: Active lurkers and selective completers in MOOCs* [Poster presentation]. 16th International Conference on Learning Analytics and Knowledge (LAK26), Bergen, Norway.
3. Tu, F., **Yu, J. H.**, Chen, H., Ding, J., Dong, L., Hsieh, C.-J., Kim, H., & Watson, S. L. (2026, June 15–19). *Measuring cognitive presence in online discussions: Interpretable AI and instructional insights from a MOOC context* [Poster presentation]. ISLS Annual Meeting 2026, Irvine, CA, United States.
4. **Yu, J. H.**, Kim, H., Hsieh, C.-J.*, Dong, L.*, Duan, S., & Watson, S. (2025, October 20-24). *Exploring professional identity development through BPS-based reflective writing in instructional design graduate course.* 2025 Annual Conference of the Association for Educational Communications & Technology (AECT), Las Vegas, NV.

5 An, Y., **Yu, J. H.**, & James, S.* (2025, October 20-24). *Investigating the higher education institutions' guidelines and policies regarding the use of generative AI in teaching, learning, research, and administration.* 2025 Annual Conference of the Association for Educational Communications & Technology (AECT), Las Vegas, NV.

6 Duan, S., McNary, S., Hsieh, C.-J.*, Dong, L.*, Watson, S., Jiang, S., Xu, F., & **Yu, J. H.** (2025, October 20-24). *Enhancing online graduate student well-being: A five-year study of the Best Possible Self intervention.* 2025 Annual Conference of the Association for Educational Communications & Technology (AECT), Las Vegas, NV.

7 Hong, J.*, Tan, Y.*, & **Yu, J. H.** (2025, October 12-16). *Understanding learner preferences: An epistemic network analysis of MOOC participation intentions.* In Proceedings of the International Conference on Quantitative Ethnography 2025 (p. 100).

8 Dong, L.*, Hsieh, C.*, Watson, S. L., **Yu, J. H.**, Lowell, V. (2025, April 23–27). *The interrelationships between students' social presence and cognitive presence in asynchronous online courses: An epistemic network analysis.* Annual Conference of the American Educational Research Association (AERA), Denver, CO, United States. *Best Paper Award from the Online Teaching and Learning SIG.

9 **Yu, J. H.** (2025, March 3–7). *The rise and fall of conversations: Tracing discussion engagement across MOOCs with Latent Growth Modeling* [Conference poster]. 15th International Conference on Learning Analytics and Knowledge (LAK25), Dublin Royal Convention Centre, Dublin, Ireland.

10 **Yu, J. H.** (2025, March 3–7). *The stayers, stragglers, and slippers: Tracking student journeys in MOOC certification programs* [Conference poster]. 15th International Conference on Learning Analytics and Knowledge (LAK25), Dublin Royal Convention Centre, Dublin, Ireland.

11 Duan, S., Watson, S. L., Dong, L.*, Hsieh, C.*, Jiang, S., Xu, F., **Yu, J. H.** (2024, October 19-23). *Unveiling novice instructional designers' professional identity: Exploring dispositions through future-oriented reflections.* 2024 Annual Conference of the Association for Educational Communications & Technology (AECT), Kansas City, MO, United States.

12 **Yu, J. H.** (2023). *A systematic review of natural language processing applications in personalized learning.* 2023 Annual Conference of the Association for Educational Communications & Technology (AECT), Orlando, FL.

13 **Yu, J. H.** (2023). *Learning experience design as collective praxis: Two design cases from higher education.* 2023 Annual Conference of the Association for Educational Communications & Technology (AECT), Orlando, FL.

14 **Yu, J. H.**, Park, Y., Kye, B. (2023). *Identifying learner profiles and predicting performance in a Digital Textbook: A case study of K-8 schools in South Korea.* Annual Conference of the Association for Educational Communications & Technology (AECT), Orlando, FL.

15 Stone, D., **Yu, J. H.**, & Hiltz, B. (2022). *Establishing external non-credit pathways into academic programs: Key success factors, for presentation.* 2022 Annual Conference of the Association for Educational Communications & Technology (AECT), Las Vegas, NV.

16 **Yu, J. H.** & Watson, S. (2016). *Profiles of attitudinal change among MOOC learners: A latent profile analysis.* 2016 Annual Conference of the Association for Educational Communications & Technology (AECT), Las Vegas, NV.

17 **Yu, J. H.** & Newby, T. (2016). *Learning with social media: Information evaluation and content creation.* 2016 Annual Conference of the Association for Educational Communications & Technology (AECT), Las Vegas, NV.

18 **Yu, J. H.** (2015). *Epistemic match and mismatch between teacher educators and pre-service teachers: Effects on learning engagement and intention of technology integration.* 2015 Annual Conference of the Association for Educational Communications & Technology (AECT), Indianapolis, IN.

19 Wu, D., **Yu, J. H.**, & Ma, X. (2015). *"Touch" to learn: A systematic literature review of touch user interface (TUI) design in educational practices from 2004 to 2014.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Indianapolis, IN.

20 Earnshaw, Y., Engerman, J., Gentry, W., Hale, P., Maddrell, J., Rysavy, M., & **Yu, J. H.** (2015). *Design of online learning modules for a non-profit organization: A collaborative service-learning initiative.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Indianapolis, IN.

21 **Yu, J. H.**, Park, Y., & Jo, I. (2015). *A data-driven typology of blended learning models in higher education: Insights from ethnographic evidence.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Indianapolis, IN.

22 **Yu, J. H.**, Ertmer, P., & Newby, T. (2014). *The relationship between pre-service teachers' personal epistemologies and perceptions of knowledge construction in online communities: A structural equation modeling.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Jacksonville, FL.

23 **Yu, J. H.**, Park, Y., & Jo, I. (2014). *Clustering instructional design models based on student learning behaviors in blended learning: Big data analytics in higher education.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Jacksonville, FL.

24 **Yu, J. H.**, & Newby, T. (2014). *Flipping the teacher education classroom to enhance engagement and learning transfer: A path analysis.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Jacksonville, FL.

25 Newby, T. J., **Yu, J. H.**, Koehler, A., & Besser, E.D. (2013). *Enhancing pre-service teachers' engagement in a technology-supported flipped classroom.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Anaheim, CA.

26 **Yu, J. H.** & Strobel, J. (2012). *A model of engineering-related beliefs system: Epistemic, epistemological, and ontological beliefs.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Louisville, KY.

27 **Yu, J. H.**, Luo, Y., Choi, J., Rajan, P., Nawaz, S., Strobel, J. & Radcliffe, D.F. (2011). *A framework of virtual collaboration building interdisciplinary research.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Jacksonville, FL.

28 **Yu, J. H.**, Kim, W., Yu, T., & Richardson, J. (2011). *Community of Inquiry in an education-based social network site.* Presented at the AACE World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education (E-Learn), Honolulu, HI.

29 **Yu, J. H.**, Kim, W., Yu, T., & Richardson, J. (2011). *Effective strategies of social network sites (SNSs): Examining Mixable through the Community of Inquiry framework.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Jacksonville, FL.

30 Rajan, P., Nawaz, S., **Yu, J. H.**, Luo, Y., Choi, J., Radcliffe, D.F., & Strobel, J. (2011). *Defining teams in team science: The case of engineering education research teams.* Presented at the Annual Conference of the Science of Team Science Conference, Chicago, IL.

31 Ertmer, P., Newby, T.J., **Yu, J. H.**, Liu, W., Tomory, A., Lee, Y., Sendurur, E., & Sendurur, P. (2010). *Facilitating students' global perspectives: Collaborating with international partners using Web 2.0 technologies.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Anaheim, CA.

32 Ertmer, P., Newby, T.J., **Yu, J. H.**, Liu, W., Tomory, A., Lee, Y., Sendurur, E., & Sendurur, P. (2010). *Transforming students' international experiences through the use of Web 2.0 tools.* Presented at the Annual Conference of the American Educational Research Association (AERA), Denver, CO.

33 Ertmer, P., Newby, T. J., Liu, W., Tomory, A., & **Yu, J. H.** (2009). *Using Web 2.0 applications to engage students in international experiences.* Presented at the Annual Conference of the Association for Educational Communications & Technology (AECT), Louisville, KY.

34 **Yu, J. H.** (2006). *Development of Augmented Reality (AR) application system in e-learning environments.* Presented at the Annual Conference of the AACE World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education (E-Learn), Honolulu, Hawaii.

35 Park, B.H., **Yu, J. H.** (2006). *An exploration of the educational value of the Augmented Reality (AR) technology, Presented at the Annual Conference of the Korean Association for Educational Information & Media (KSET).* Seoul, South Korea.

## Book Chapters

1 Lachheb, A., Quintana, R. M., **Yu, J. H.**, & Zamora, A. N. (2023). Diversity, Equity, Inclusion, and Justice in Action: A Study of Learning Experience Designers' Practices. In *Toward Inclusive Learning Design: Social Justice, Equity, and Community* (pp. 197-215). Cham: Springer Nature Switzerland.

2 Olesova, L., Garcia, B., & **Yu, J. H.** (2023). Careers in higher education for non-faculty. *Becoming an LIDT Professional.* EdTech Books.

3 **Yu, J. H.**, Ertmer, P., & Newby, T.J. (2014). Enhancing faculty readiness for teaching in flipped classrooms. In B. Hokanson, A. Gibbsons, M. Tracey, & G. Clinton (Eds.), *AECT 2014 Summer Research Symposium Book.* New York: Springer.

4 Chen, X., Choi, J. H. & **Yu, J. H.** (2012). Applying social network analysis and social capital in personal learning environments of informal learning. In V. Dennen and J. Myers (Eds.) *Virtual Professional Development and Informal Learning via Social Networks.* New York, NY: IGI Global.

5 Chen, X., Choi, J.H., **Yu, J. H.**, & Newby, T. (2012). Teaching assistants' community of practice in facilitating pre-service teachers' online learning in a blended course. In H. Yang and W. Shuyan (Eds.) *Cases on Formal, Non-Formal, and Informal Online Learning: Opportunities and Practices.* New York: IGI Global.

## Unpublished Manuscripts and Tech Reports

1 Park, Y. & **Yu, J. H.** (2024). *Usability test results of the AI digital textbook prototype.* (Research Material No. RM 2024-12). Korea Education and Research Information Service.

2 **Yu, J. H.** & Kye, B. (2016, in Korean). *New schools for 21st-century learners: open learning spaces.* Seoul, Korea: Korean Education Research Information Services.

3 Kye, B., **Yu, J. H.**, & Park Y. (2016, in Korean). *Preparing 21st-century competencies: A case study of digital textbook in Korean elementary school.* Seoul, Korea: Korean Education Research Information Services.

4 Kye, B., & **Yu, J. H.** (2015, in Korean). *Digital textbook and OER policies in the United States.* Seoul, Korea: Korean Education Research Information Services.

## Invited Talks

1 **Yu, J. H.** (2026). *Learning Amid Unscripted Times.* Panelist, University Research Day, University of North Texas.

2 **Yu, J. H.** (2026). *When AI thinks for you, who are you becoming?* Building Human-centered AI systems that push back. Educational Administration & Human Resource Development. Texas A&M.

3 **Yu, J. H.** (2026). *Designing for learning, not output.* UNT Learning Technologies Research Seminar.

4 **Yu, J. H.** (2024). *Artificial intelligence in education.* Invited address delivered at the doctoral seminar. Department of Educational Technology. Ewha Womans University. Seoul, Korea.

5 **Yu, J. H.** (2015, December). *Cultivating digital educators: How learning analytics can empower teachers.* Invited address delivered at the international academic conference of 100th-anniversary commemoration of Ewha Teacher Education. Ewha Womans University. Seoul, Korea.

6 **Yu, J. H.** (2015, December). *Learner profile analysis to enhance adaptive learning experiences.* Invited address delivered at the international academic conference of 100th-anniversary commemoration of Ewha Teacher Education. Ewha Womans University. Seoul, Korea.

7 **Yu, J. H.** (2015, December). *Digital citizenship: Becoming a critical consumer, a constructive producer, and a social advocate.* Invited address delivered at the international academic conference of 100th-anniversary commemoration of Ewha Teacher Education. Ewha Womans University. Seoul, Korea.

## Grants and Funding

### Awarded and Funded

2026–2028 **SALAMANDER: Strengthening Academic Librarians' AI Methods and Networks for Digital Ethics Research**
IMLS Laura Bush 21st Century Librarian Program — Co-PI | $181,779

2026–2027 **HyCoReg: AI-Human Agentic Support for Distributed Data Science Learning**
NSF IUSE, Award #2142327 (PI: Xun Ge) — Senior Personnel

2026–2027 **Attracting and Cultivating AI Scholars through Multi-faceted Mentoring, Research Experiences, and Cohort Building**
NSF S-STEM Supplemental Funding — Senior Personnel | $25,000

2026 **Partner, Not Crutch: Designing a Metacognitive Nudge to Promote AI Co-Regulation**
UNT Learning Institute Pilot Project — PI | $5,000

2026–2027 **AI-Driven Metacognitive Support for STEM Problem-Solving**
UNT Learning Institute Community of Research — Facilitator | $1,500

2025 **Instructional Material Development for LTEC 5601: Introduction to Learning Analytics**
UNT Open Educational Resources Grant Program — PI | $4,000

2012–2013 **Investigation of EPICS as a High School Pathway into Engineering**
NSF REE. Purdue University — Research Assistant | $55,098

## Teaching

### Department of Learning Technologies, University of North Texas, 2023-current

[LTEC 5300] Learning and Cognition

[LTEC 5601] Introduction to Learning Analytics

[LTEC 5602] Predictive Modeling in Learning Analytics

[LTEC 5610] Analysis of Research in Learning Technologies

[LTEC 6501] Introduction to Research in Learning Technologies

[LTEC 6500] Introduction to Quantitative Research in Learning Technologies

[LTEC 6800] Cognitive Apprenticeship

### Learning Design and Technology Program, Purdue University, 2008-2023

[EDCI 531] Learning Theories and Instructional Design

[EDCI 568] Educational Applications of Web 2.0 Tools

[EDCI 569] E-Learning by Design

[EDCI 577] Strategic Assessment and Program Evaluation

[EDCI 660] Learning Design and Technology Seminar I

[EDCI 270] Introduction to Educational Technology and Computing

Department of Learning Sciences and Technologies, Virginia Tech, 2014-2016

[EDIT 5614] Digitally Mediated Learning

[EDIT 6664] Trends & Issues in Instructional Technology

[EDIT 6944] Professional Seminar

## Advising & Mentoring

As Major/Co-Major Professor (Ph.D.)

Paulina Romero (UNT Learning Technologies, Distributed/Cohort 2026)

Fengjiao Tu (UNT Information Science, Residential/Cohort 2027)

Janelle Schnacker (UNT Learning Technologies, Distributed/Cohort 2028)

Katherine Kendall (UNT Learning Technologies, Distributed/Cohort 2030)

As Committee Member (Ph.D.)

Julie Cummings (UNT Learning Technologies, Distributed/Cohort 2027)

Gloria Avalos (UNT Learning Technologies, Distributed/Cohort 2027)

Shadarra James (UNT Learning Technologies, Distributed/Cohort 2027)

Cassandra Buffington-Bates (UNT Learning Technologies, Distributed/Cohort 2027)

Menuka Gurung (UNT Learning Technologies, Distributed/Cohort 2028)

Nancy Hill (UNT Learning Technologies, Distributed/Cohort 2028)

Keith Hankins (UNT Learning Technologies, Distributed/Cohort 2028)

Abbie Teel (UNT Learning Technologies, Residential/Cohort 2028)

Ebrahim Haghighi (UNT Learning Technologies, Residential/Cohort 2028)

Liu Dong (Purdue Learning Design and Technology, Residential/Cohort 2026)

As Faculty Mentor (MA)

Julian Jones (UNT Learning Technologies, Cohort 2027)

Reginald Thomas (UNT Learning Technologies, Cohort 2027)

## Academic Services

Departmental/University Committees

2026-present UNT LTEC Graduate Curriculum Committee

| | |
|---|---|
| 2023-present | UNT LTEC Scholarship and Awards Committee |
| 2024-2025 | UNT LTEC Assistant Professor Search Committee |
| 2024-2025 | UNT LTEC Master Program AI + Learning Analytics Concentration Task Force |
| 2024-present | UNT LTEC Undergraduate Curriculum Committee |
| 2023-present | UNT Anuradha and Vikas Sinha College of Artificial Intelligence and Advanced Analytics Scholarship Committee (College of Information until 2026) |
| 2018-2023 | Michigan Social Work Online Degree Program Curriculum Committee |
| 2020-2023 | Michigan Diversity, Equity, Inclusion for Online Degree Program Committee |

### Program Committee/Reviewer

| | |
|---|---|
| 2008-present | Association for Educational Communications and Technology (AECT) |
| 2008-present | American Educational Research Association (AERA) |
| 2011-present | Society for Learning Analytics Research (SOLAR) |
| 2025-present | Education Research Funding Programme Office (Nanyang Technological University) |
| 2008-2013 | American Society for Engineering Education (ASEE) |
| 2016-2023 | Online Learning Consortium (OLC) |

### Editorial Board Memberships

| | |
|---|---|
| 2025–present | Editorial Board Member, Educational Technology & Society (ET&S) |
| 2026–present | Editorial Board Member, Interdisciplinary Journal of Problem-Based Learning (IJPBL) |