# Weijane Lin, Ph.D.

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#### Education

- Ph.D. Informatics – Intelligence Science and Technology, Kyoto University, Japan (2009)
- M.S. Agricultural Extension – Educational Technology (Minor: Communication), National Taiwan University, Taipei, Taiwan (2004)
- B.S. Agricultural Extension – Extension Education (Minor: Business Administration), National Taiwan University, Taipei, Taiwan (2001)

## **Professional Experiences and Academic Positions**

- Research Fellow, Research Center for Digital Humanities, National Taiwan University. 2024 – present.
- Research Fellow, Center for Artificial Intelligence and Advanced Robotics, National Taiwan University. 2018 – present.
- Division Director of e-Learning, Computer & Information Networking Center, National Taiwan University. 2016-2024.
- Professor, Department of Library and Information Science, College of Liberal Arts, National Taiwan University. 2023/08-present.
- Associate Professor, Department of Library and Information Science, College of Liberal Arts, National Taiwan University. 2015-2023.
- Assistant Professor, Department of Library and Information Science, College of Liberal Arts, National Taiwan University. 2010-2015.
- Editorial Board, British Journal of Educational Technology, British Educational Research Association, 2023/03 - present.
- Editorial Board Member, Educational Technology & Learning, Chinese Association for Computer and Educational Technology, 2012/11– present.
- Executive Editor, Research of Educational Communications and Technology, Taiwan Association for Educational Communication and Technology. 2015/01 – 2018/01.
- Library Automation & Networking Committee Member, Library Association of the Republic of China. 2022/04 - present.
- Deputy Secretary-general, Taiwan Association for Educational Communication and Technology. 2015/01 2018/01
- Membership Committee Chairperson, Chinese Association of Library and Information Science Education. 2014/11 - 2016/11.
- Visiting Researcher, Center for Academic Center for Computing and Media Studies, Kyoto University. 2018/03 - 2018/08.
- Post-doctoral Researcher, Center of Innovation and Synergy for Intelligent Home and Living Technology, National Taiwan University, 2009-2010
- Research Fellow, Academic Center for Computing and Media Studies, Kyoto University, 2008-2009

Instructional Designer, Division of e-Learning, Computer & Information Networking Center, National Taiwan University, 2002-2004

# **Professional and Scholarly Affiliations**

ACM SIGCHI, CHI Taipei Chapter (TAICHI); IEEE Computer Society, Education Society, Communication Society

Japan Society for Educational Technology (JSET); Japan Society for Information and Systems in Education (JSISE); The Japanese Society for Artificial Intelligence (JSAI)

American Society of Information Science & Technology (ASIST); Library Association of the Republic of China (LAROC); Chinese Association of Library and Information Science Education (CALISE)

Taiwan Association for Educational Communication and Technology (TAECT); Chinese Association for Computer and Educational Technology (CAECT)

#### **Awards and Honors**

- NTU College of Liberal Arts Excelsior Chair Professor (2024/08/01 2027/07/31)
- Excellent Young Scholar Research Grants, National Science & Technology Council, Taiwan, R.O.C. (2022/08/01 - 2025/07/31)
- Laurel Research Project Fellowship, National Taiwan University (2022-2025)
- Merit-paid Professor, National Taiwan University (2023, 2024)
- Merit-paid Associate Professor, National Taiwan University (2019, 2020, 2021, 2022, 2023)
- Academic Research Performance Grant, National Taiwan University (2013, 2014, 2015, 2018, 2020, 2022)
- Outstanding Mentor, Department of Library and Information Science, National Taiwan University (2020,
- Outstanding Teaching Award, National Taiwan University (2016, 2017, 2024)

## **Research Grants Awarded (Selected)**

- Principal Investigator. Using Augmented Reality in Enhancing Visually Impaired Learners' Science Reading: Design and Development of an AR-based Earth Science Graph Reading System (2022/08/01 ~ 2025/07/31), National Science & Technology Council, Taipei, Taiwan. NSTC111-2628-H-002-006-MY3 (Excellent Young Scholar Research Grants).
- Principal Investigator. Enhance Visually Impaired Patrons' Science Reading through Augmented Reality Picture Book (2020/08/01 ~ 2022/07/31), Ministry of Science and Technology, Taipei, Taiwan. MOST 109-2410-H-002-205-MY2
- Principal Investigator. Developing Augmented Reality Applications to Facilitate Visually Impaired Youths Learning Experiences in Museums and Libraries: A Design-based Research (2019/08/01 ~ 2021/04/30), Ministry of Science and Technology, Taipei, Taiwan. MOST 108-2410-H-002-223
- Co-Principal Investigator. Monitoring and Improving QoL of Elderly People Living along with Remote Social Interaction Support (2018/06/01 ~ 2022/05/31). MOST-JST Japan-Taiwan Research Cooperation, Ministry of Science and Technology, Taipei, Taiwan. MOST107-2923-S002-001-MY3.
- Principal Investigator. Rediscover the Chronology of Tyozaburo Tanaka through Digital Preservation (2018/03-2018/08), MOST Subsidy for Short-Term Research Abroad for Technologists. Ministry of Science and Technology, Taipei, Taiwan. MOST107-2918-I-002-014
- Principal Investigator. Interaction Design and Evaluation of Augmented Reality Applications for Museums and Libraries (2017/08~2019/07), Ministry of Science and Technology, Taipei, Taiwan. MOST106-2410-H-002-093-MY2
- Principal Investigator. Evaluating Child Patron's Performance and Perception of Robotic Assistance in Library Book Locating (2014/08~2017/01), Ministry of Science and Technology, Taipei, Taiwan. MOST-103-2410-H-002-173-MY2

### **Publications (selected)**

#### **Journal Articles**

- Yueh, H.-P., Hsu, C.-Y., & Lin, W.\* (2024, September). Tracing students' learning behaviors in statistical practice sessions: What do visualizations of learning logs tell us? Journal of Research in Education Science, 69(3). 169-191.
- Yueh, H.-P., Lin, W., Huang, C.-Y., Chen, C.-H., & Shih, Y.-L. (2023, October). How we teach 2. information ethics in business education in Taiwan: A network analysis approach. Journal of Information Management, 30 (4), 445-468.
- Chen, Y.-C., Yeh, S.-L., Lin, W., Yueh, H.-P., Fu, L.-C. (2023, April). The effects of social presence 3. and familiarity on children-robot interactions. Sensors, 2023, 23(9), 4231 https://doi.org/10.3390/s23094231
- Hsu, L.J.<sup>+</sup>, Lin, W.<sup>+</sup>, & Yueh, H.-P. (2022, December). Connecting Twitter with scholarly network: 4. Exploring HCI scholars' interaction from an SNA approach, IEEE Transactions on Professional Communication, 65(4), 502-515.
- Lin, W., Lo, W.-T. & Yueh, H.-P. (2022, October). Effects of learner control design in an AR-based 5. exhibit on visitors' museum learning, PLoS One, 17(10):e0274826. doi: 10.1371/journal.pone.0274826
- Yueh, H.-P., Huang, C.-Y., & Lin, W.\* (2022, September). Examining the differences between 6. information professional groups in perceiving information ethics: An analytic hierarchy process study, Frontiers in Psychology, 13:954827. doi:10.3389/fpsyg.2022.954827
- Lin, W. & Chang, H.-J. (2022, June). Understanding Taxonomical Botanist's Usage of Special 7. Collection in the Academic Library: A bibliometric study of NTU Tanaka Collection, *Journal of Library* and Information Studies, 20(1), 101-129.
- Lin, W., Wang, J.-Y., & Yueh, H.-P.\* (2022, June). Learning information ethical decision making with a simulation game, Frontiers in Psychology (Human-Media Interaction, Research Topic of Serious Game), 13:933298. Doi:10.3389/fpsyg.2022.933298
- Lin, W., Chen, H.-C., & Yueh, H.-P.\* (2021). Using different error handling strategies to facilitate older 9. users' interaction with chatbots in learning information and communication technologies, Frontiers in Psychology, 12:785815. doi:10.3389/fpsyg.2021.785815
- 10. Lin, W. & Feng, Y.-C. (2021, December). Exploring art museum experiences with exhibit label design: A visitor study approach, Journal of Library and Information Studies, 19(2), 145-172.
- 11. Lin, W., Kotakehara, Y., Hirota, Y., Murakami, M., Kakusho, K., & Yueh, H.-P.\* (2021, May). Modeling Reading Behaviors: An Automatic Approach to Eye Movement Analytics. *IEEE Access*, 9, 63580-63590. doi:10.1109/ACCESS.2021.3074913.
- 12. Yueh, H.-P., Lin, W.\*, Wang, S.-C., Fu, L.-C. (2020, September). Reading with robot and human companions in library literacy activities: A comparison study, British Journal of Educational Technology, 51(5), 1884-1900. DOI:10.1111/bjet.13016
- 13. Hsu, C.-Y., Lin, W.\*, & Yueh, H.-P. (2020, July). Designing and Developing a Sandbox-style Tangible AR for Geoscience Learning, Lecture Notes in Computer Science 12193: Cross-Cultural Design: Methods, tools and user experience, 1-10. https://doi.org/10.1007/978-3-030-49913-6 24
- 14. Huang, T.-C., Lin, W. & Yueh, H.-P.\* (2019, March). How to cultivate an environmental responsible maker? A CPS approach to a comprehensive maker education model, *International Journal of Science* and Mathematics Education, 17 (Suppl 1), 49-64.
- 15. Kakusho, K., Takase, F., Murakami, M., Lin, W., & Yueh, H.-P. (2019, August). How Learners with Different Cognitive Styles Read Learning Materials with Text and Pictures: A Gaze Analysis. Lecture *Notes in Computer Science 11576: Cross-Cultural Design: Methods, tools and user experience*, 435-445.
- 16. Wang, J.-Y., Lin, W.\*, & Yueh, H.-P. (2019, August). Collaborate or Compete? How Will Multiplayers' Interaction Affect Their Learning Performance in Serious Games, Lecture Notes in Computer Science 11576: Cross-Cultural Design: Methods, tools and user experience, 482-491.
- 17. Lu, M.-H., Lin, W. & Yueh, H.-P.\* (2018, June) How do Employees in Different Job Roles in the Insurance Industry Use Mobile Technology Differently at Work? IEEE Transactions on Professional *Communication*, *61*(2), 151-165.

- 18. Lu, M.-H., Lin, W.\* & Yueh, H.-P.\* (2017, October). Development and Evaluation of a Cognitive Training Game for Older People: A Design-based Approach, Frontiers in Psychology, 8:1837. doi: 10.3389/fpsyg.2017.01837
- 19. Hu, T-.C. & Lin, W.\* (2017, August). The Trend Analysis of E-book Research in Library and Information Studies, Research of Educational Communication and Technology, 116, xx-xx. (in press)
- Lu, M.-H., Lin, W. & Yueh, H.-P.\* (2017, June). Enterprise Mobility Implementation Strategies and Their Impacts on Organizational Performance, Journal of Library and Information Studies, 15(1), 77-101.
- Lin, W.\* & Yueh, H.-P. (2016, July). The Relationship between Robot Appearance and Interaction with Child Users: How Distance Matters. Lecture Notes in Computer Science 9741: Cross Cultural Design, 229-236.
- 22. Yueh, H.-P., & Lin, W.\* (2016, July). Service, appearances and psychological factors in intelligent home service robots. Lecture Notes in Computer Science 9741: Cross Cultural Design, 608-615.
- 23. Lu, M.-H., Yueh, H.-P., & Lin, W. (2016, July). Mobile technology use among sales people in insurance industry. Lecture Notes in Computer Science 9741: Cross Cultural Design, 761-768.
- 24. Yueh, H.-P., Lu, M.-H.\*, & Lin, W. (2016, June). Employees' Acceptance of Mobile Technology to Achieving High Performance in a workplace: An Empirical Study Using SEM and fsQCA, Journal of Business Research, 69(6), 2318-2324.
- Yueh, H.-P., Liu, Y.-L., & Lin, W.\* (2015). Fostering interdisciplinary learning in a smart living technology course through a PBL approach, International Journal of Engineering Education, 31(1B), 220-228.
- 26. Lin, W., Yueh, H.-P.\*, Wu. H.-Y., & Fu, L.-C. (2014). Developing a service robot in children's library: A design-based research approach. Journal of the Association for Information Science and Technology, *65*(2), 290-301.
- 27. Lin, W., Yueh, H.-P.\*, & Chou, J.J. (2014). Electronic pet robots for mechatronics engineering education: A project-based learning approach. *International Journal of Engineering Education*, 30(1), 231-239.
- Yueh, H.-P., Chen, T.-L., Lin, W., & Sheen, H.-J. (2014). Developing digital courseware for a virtual nano-biotechnology laboratory: A design-based approach. Educational Technology & Society, 17(2), 158-168.
- Yueh, H.-P., Lin, W.\*, Liu, Y.-L., Shoji, T., & Minoh, M. (2014). The development of an interaction support system for international distance education, *IEEE Transactions on Learning Technologies*, 7(2), 191-196.
- 30. Yueh, H.-P., Lin, W.,\* & Lu, T. (2014). Users' perceptions of blog functions: Education vs. personal use. Program: Electronic Library and Information Systems, 48(1), 41-52.
- Yueh, H-P., Lin, W.\*, Chou, Y.L., & Lu, T.Y. (2013). Examining older users' performance on and preference for menu designs of digital photo frames. Theoretical Issues in Ergonomics Science, 14(3), 273-289.
- 32. Lin, W., & Huang, C.-Y. (2013). Understanding public libraries' decisions on eBook service: An AHP analysis. Journal of Library and Information Studies, 11(2), 117-148.
- Lin, W. (2010). A design of supporting mechanism to advance student learning in international distance education. Journal of Japanese Society for Artificial Intelligence, 25(1), 158.
- Lin, W., Yueh, H.-P. & Minoh, M. (2009). A case study of advancing international distance education between Taiwanese and Japanese universities, Asia-Pacific Collaborative Education Journal, 5(1), 1-12.
- 35. Lin, W., Yueh, H.-P., Murakami, M. & Minoh, M. (2008). Applying a 3-tiered Blogging System to Support Learning in a Distance Course. The Journal of Information and Systems in Education, 7(1), 76-85.

### **Conference Papers**

- Lin, W.\*, Masumoto, K., Kakusho, K., & Yueh, H.-P. (2024, June 29 July 4). How augmented visual feedback aids patrons' reading and interaction with rare books - Evidence from eye movements. Paper accepted for presentation at HCI International 2024. Washington DC, USA.
- Cheng, C.-W. & Lin, W. (2023, October 27 31). How we study disabled people in LIS Research area: 2. A systematic content analysis. Poster Paper accepted for presentation at the 86th Annual Meeting of the Association for Information Science and Technology (ASIS&T 2023). London, UK.
- 3. Masumoto, K., Kakusho, K., Lin, W. & Yueh, H.-P. (2023, August 24 - 26). Analyzing readers' eye movement across different layouts of multimedia content. Paper accepted for presentation at the 47th Annual Conference of the Japanese Society for Information and Systems in Education (JSiSE), Osaka, Japan. (in Japanese)
- Lin, W., Masumoto, K., Kakusho, K.\*, & Yueh, H.-P. (2023, July 23 28). How scientific illustration 4. and photography aid learners' reading - Evidence from eye movements. Paper presentation at HCI International 2023. Copenhagen, Denmark.
- Lin, W., Hung, P.-L., & Yueh, H.-P.\* (2023, July 23 28). Design of an AR application to support 5. students with CVD in learning chemistry. Paper accepted for presentation at HCI International 2023. Copenhagen, Denmark.
- Wang, Y.-C. & Lin, W. (2023, June 7). Using virtual reality technology to construct an eco-museum -6. A case study of National Taiwan University Museums. Poster paper at Internal Conference on E-learning and Educational Technology (ICEET 2023). Taipei, Taiwan. (Best Poster Paper Award)
- Huang, P.-W., Chen, C.-S., Chang, Y.-H., Lo, T.-P., Yeh, H.-T. & Lin, W. (2022, November). Petit 7. Mood: AR Pet Game as Negative Emotion Reliever for Depressed University Students. Inviting Poster presentation at CSCW2022, Online.
- Yang, T.-L., Hsu, C.-C. & Lin, W. (2022, November). Pocket World: Using Mobile AR to Tour Visitors 8. in a Miniature Museum. Inviting Poster at CSCW2022, Online.
- 9. Liu, C.Y., Fu, A., Hsiao, L. Y., Hung, C.C., & Lin, W. (2022, October). Lab Expert - Writing Chemistry Experiment Planning Reports with AR. Poster presentation at TAICHI2022.
- 10. Chen, C.-Y., Lee, M.-J., Huang, J.-Y., Chou, Z., Chen, L.-C., Lin, W. (2022, October). SMartVegi: AR Assistant for Vegetable Shopping in Conventional Markets. Poster presentation at TAICHI2022.
- 11. Lin, W., Yueh, H.-P., & Huang, C.-Y. (2021, December). How do you like to eat with robot? An HRI study, paper presentation at IEICE HCG Symposium, 15-17th December, 2021, Tokyo, Japan.
- 12. Cheng, C.-W. & Lin, W. (2021, November). Investigating the Research Development of Special Needs Patrons in Taiwan Libraries from a Social Inclusion Perspective, Poster presentation at the Conference of LIS and Practices (Co-LISP 2021), 26-27 November 2021, National Taiwan University, Taipei.
- 13. Tsao, Y.-N., Shu, Y.-H., & Lin, W. (2021, July). Data-driven Persona Development for Art Museums, Poster presentation at TAICHI 2021, 23-24 July, 2021, Virtual Conference.
- 14. Wang, J.-Y., Lin, W., & Yueh, H.-P. (2021, March). Developing a Serious Game for Information Ethics Literacy, Poster paper presentation at iConference 2021, 17-31 March, 2021, Virtual Conference.
- 15. Gamborino, E., Yueh, H. P., Lin, W., Yeh, S. L., & Fu, L. C. (2019, October). Mood Estimation as a Social Profile Predictor in an Autonomous, Multi-Session, Emotional Support Robot for Children. In 2019 28th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN) (pp. 1-6). IEEE.
- 16. Lin, S.T., Chen, H.J., Li, C.A., Tseng, Y.J., & Lin, W. (2019, October). Support. H Creating a safer sport experience with AR. Poster presentation at TAICHI2019. (People's Choice Award)
- 17. Lin, W., Lo, W.-T., & Yueh, H.-P. (2019, March). How the Multimodal Media in Augmented Reality Affects Museum Learning Experience, paper presentation at the 12th Asia Pacific Workshop on Mixed and Augmented Reality (APMAR2019), 28-29 March, 2019, Nara, Japan.
- Lin, W. & Yueh, H.-P. (2018, August). Evaluating Child Patrons' Performance and Perception of Robotic Assistance in Library Book Locating, paper presented at the 27th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN2018), 27-31 August 2018, Nanjing and Tai'an, China.

- 19. Lin, W., Chang, Y-T., & Yueh, H.-P. (2018, August). Design Principles of Digital Library for the Visually Impaired, Proceedings of 2018 Eleventh International Conference on Ubi-Media Computing (Ubi-Media), 22-25 August 2018, Nanjing, China.
- 20. Lin, W. & Yueh, H.-P. (2017, July). Effects of Guided Reading Design on Comprehension for Visual and Verbal Style Learners, Poster Presentation at the 8th International Conference on Applied Human Factors and Ergonomics (AHFE 2017), 17-21 July 2017, Los Angeles, USA.
- Yueh, H.-P., Chen, J.-C., & Lin, W. (2017, July). Affordance-based Menu Design for Users of Different Generations, Poster Presentation at the 8th International Conference on Applied Human Factors and Ergonomics (AHFE 2017), 17-21 July 2017, Los Angeles, USA.

### **Book Chapters (Referred)**

- Lin, W. (2021, March). Research Trends of eBook and Digital Reading (2010-2019), in Wu, M.-M. (Ed.), Research of Library and Information Science. Taipei: eCulture Pub. (in Chinese)
- Lin, W. (2013, January). Research Trends of eBook and Digital Reading, in Pu, H.-D. (Ed.), Research 2. of Library and Information Science. Taipei: Library Association of the Republic of China. (in Chinese)