

weilai-cv

WEI Lai

Postdoctoral Fellow, The Hong Kong Polytechnic University

Naming

- **Wei Lai**, ‘魏萊’, has the same Chinese pronunciation as ‘future(未来)’.

Brief

- Postdoctoral Fellow, Department of Language Science and Technology, The Hong Kong Polytechnic University (2024 – present). PhD, School of Design, PolyU (2019 – 2024), on embodied AI teachers and instructional gesture: empirical studies of word–gesture alignment, learning performance, and student perception, plus working lecture prototypes evaluated with students. Also prototype health and social apps.
- University teaching: Lecturer, Visual Communication Design (BA), Chongqing University of Education (2017 – 2024) and Chongqing Vocational College of Art and Engineering (2016); Teaching Assistant, Interaction Design (MDes) and Interactive Media (BA), PolyU School of Design (2019 – 2022).
- **Keywords:** Embodied AI Teachers; Embodied Pedagogical Agents; Instructional Gesture; Multimodal Interaction; AI in Education; Multimedia Learning.

Current Research

- Multimodal corpus of **dialogue, gesture, gaze, social-interaction cues**, and fNIRS (in progress; PolyU × South China Normal University).
- Ongoing research on instructional gesture and embodied pedagogical agents.

Education

- **School of Design, The Hong Kong Polytechnic University** (香港理工大学设计学院), *Hong Kong SAR, China*
 - **Ph.D.** 2019 - 2024, *Design*, specializing in AI instructor design, gesture design, virtual learning platform, multimodal interaction, research methods.
 - **Dissertation topic:** Animated Gestures: Pedagogical Agents’ Meaningful Instructional Gesture Design for Effective Educational Information Presentation.
 - **Supervisor:** Kenny K. N. Chow; **examiners:** Wang Minjuan, Dragan Gasevic.
 - **Dissertation committee:** Kenny K. N. Chow (Chief supervisor), Jaden Park (BoE Chair), Wang Minjuan (External examiner), Dragan Gasevic (External examiner)
- **Central Saint Martins, University of the Arts, London, London, UK**
 - MA. 2013 – 2015, *Character Animation*, specializing in 2D Animation, Computer Art, and Illustration.

- **College of Animation and Digital Arts, Communication University of China** (中国传媒大学动画与数字艺术学院) , *Beijing, China*
 - BA. 2008 – 2012, *Animation*, specializing in 2D Animation, Motion Images, Film Editing, Computer Art, Interaction Design, and Illustration.

Experiences in Universities

- 2026 – Present, Postdoctoral Fellow, **Chen Si Lab**, Department of Language Science and Technology (LST), The Hong Kong Polytechnic University
- 2024 – 2026, Postdoctoral Fellow, **Brain, Language, and Computation Laboratory (BLC Lab)**, Department of Language Science and Technology (formerly Chinese and Bilingual Studies), The Hong Kong Polytechnic University
- 2023 – 2024, Research Associate, Consultancy Services for **Well-Being Design Guide in Public Housing Development**, The Hong Kong Polytechnic University and Architecture Commons
- 2017 – 2024, Lecturer, **Visual Communication Design (BA)**, Arts College, Chongqing University of Education
- 06-12 2022, Research Assistant, The Challenges and Opportunities in AIoT UX Design: A Comparison Study of AIoT, IoT and Conventional Healthcare Appliances, The Hong Kong Polytechnic University
- 2019 – 2022, Teaching Assistant, **Interaction Design (MDes)**, School of Design, The Hong Kong Polytechnic University
- 2019 – 2022, Teaching Assistant, **Interactive Media (BA)**, School of Design, The Hong Kong Polytechnic University
- 2016, Lecturer, **Visual Communication Design (BA)**, Chongqing Vocational College of Art and Engineering, Chongqing

University Service

- 2021 – Present, Senior Hall Tutor, **Hung Hom Halls (LS Hall)**, **PolyU**. Coordinating hall tutors, student mentoring, and hall educational activities.
- 2023 – 2026, Peer review for *Brain and Language*, *IEEE Transactions on Learning Technologies*, *Education and Information Technologies*, *JMIR mHealth and uHealth*, *European Journal of Education*, *ACM CSCW*, and *IASDR*.

Experiences in Industry

- 2023, Cameraman, Public Art Commission **Treatment III**, Melbourne
- 2019, Animator, Minsheng Bank, Beijing
- 2017-2022, Visual Designer, Arts College, Chongqing University of Education, Chongqing
- 2017-2019, Instructor&Consultant, Art Creativity Global, Chongqing
- 2017, Cameraman and filmmaker, Fwong Makeup & Styling Studio, Chongqing
- 2017, Visual identity designer, Cube Art Centre, Chongqing
- 2016, Filmmaker of post production, Dr.Ray Ltd, Zhuhai
- 2016, Animator of Experimental Film, Reorder Film Production Studio, Berlin
- 2014, Stop-motion Designer and Animator, **Now They Are Here, Now They Are Not**, English National Opera, London
- 2014, Visual designer and filmmaker of post production, Streetstories Social Network, London
- 2014, Filmmaker of **Adverse Reaction**, The Old Operating Theatre, Museum Herb Garret, London

- 2009, Design Assistant, Zendai Art Centre, Shanghai

Grants

- 2025, Postdoctoral Matching Fund, PolyU
- 2025, Co-Principal Investigator, MOE Humanities and Social Sciences Project. From Myth to Gameplay: The transmediation of symbols and construction of identity in gamified worlds.
- 2023, Additional Top Conference Grant, PolyU
- 2020, Co-Principal Investigator, Municipal Education Commission of Chongqing. Data visualization-based learning analytics system.
- 2019, Teaching Postgraduate Studentship, PolyU
- 2019, PI, CQUE Teaching Research Grant. Five-dimensional assessment for illustration design.

Projects

- 2020 Project Second Leader, Design and development of data visualization-based learning analysis system for the Science and Technology Research Project of the Municipal Education Commission
- 2019 Project Leader, 'Five-Dimensional' assessment and evaluation system of Illustration Design for University-level project
- 2019 Participated in '1+1+1' experiential teaching mode of fashion design for University-level project
- 2017 Participated in Chongqing municipal-level project-speciality visual communication design department

Publication

Journal and conference papers

- **Grounding Pedagogical Intents in Embodied AI Teachers: A Human-Centered Framework for Designing and Evaluating Instructional Gestures.** Lai Wei, Pangrui Xing, Kenny K. N. Chow, Stephen Jia Wang. *International Journal of Human-Computer Interaction*, 2026 (SSCI, Q1; IF 4.9).
- **CapSenseBand: Sustaining cross-disciplinary creativity when stitches must meet signals.** Sark Pangrui Xing, Hongci Hu, Lai Wei, Le Fang, Ziqian Bai, Kinor Shou-xiang Jiang, Stephen Jia Wang. *Proc. Creativity & Cognition (CC '26)* (Rank A HCI).
- **Motion tracking of daily living and physical activities in healthcare: A systematic review from designers' perspective.** Lai Wei, Stephen Jia Wang. *JMIR mHealth and uHealth*, 2024 (SCIE, Q1; IF 6.2).
- **Developing cue-behavior association for habit formation: A qualitative study to explore the role of avatar in hypertension.** Yujie Zhu, Yonghao Long, Lai Wei, Yaqi Zhang, Zhengtao Ma, Kun-Pyo Lee, Lin Zhang, Stephen Jia Wang. *Digital Health*, 2024 (SCIE, SSCI, Q1; IF 3.9).
- **When Gestures and Words Synchronize: Exploring A Human Lecturer's Multimodal Interaction for the Design of Embodied Pedagogical Agents.** Lai Wei, Kenny K. N. Chow. *Companion Proc. CSCW '23* (Rank A HCI; CCF-A).
- **How Students Perceive Lecturers' Gestures? An Exploration In Gesture-meaning Matching Toward Embodied Pedagogical Agent Design.** Lai Wei, Kenny K. N. Chow. *IASDR '23* (Rank A Design).
- **Who Shapes the Network of a Pedagogical Space? Clues from the Movements in the Physical Places.** Lai Wei, Kenny K. N. Chow. *International Conference on Advances in Mobile*

Computing and Multimedia Intelligence. MoMM 2022.

- **Interface, Pedagogical Agents and Chatbox in Virtual Learning Environments: An Eye Tracking Experiment.** *Lai Wei, Kenny K. N. Chow.* The ninth Congress of the International Association of Societies of Design Research. IASDR 2021 (published 2022).
- Investigating the Use of Folk Art Elements in Domestic Animation Films, *Lai Wei*, 2019
- Researching on 'Five-Dimensional' Assessment and Evaluation System of Illustration Design, *Lai Wei*, 2019
- The Practicability of Dynamic Image Design to Visual Education in the Context of Contemporary Visual Culture, *Lai Wei*, 2018
- Media-Friendly Medium Prospection -Discussing the Leading Future of Animation Typology, *Lai Wei*, 2018.

Posters

- Gender differences in students' perceptions and outcome of feedback from embodied AI instructors. *Mingjun Zhai, Lai Wei, Zhe Gao, Ping Li.* CogSci 2026 (poster; Rank A Cognitive Science).
- The roles of gestures in dyadic interaction: Associations with effective communication, emotion regulation and individual traits. *Lai Wei, Mingjun Zhai, Suiping Wang, Ping Li.* ISGS '25 (poster; Rank A Gesture Studies).
- From human lecturers to pedagogical agents: Investigating word-gesture alignment for instructional gesture design. *Pangrui Xing, Lai Wei, Kenny K. N. Chow.* ISGS '25 (poster; Rank A Gesture Studies).
- **How shared interactive experiences reshape the semantic representations of abstract concepts.** *Mingjun Zhai, Lai Wei, Ping Li.* CogSci 2025 (poster; Rank A Cognitive Science).

Under review

- Delivering Personalized LLM-Generated Feedback Through Embodied Pedagogical Agents: The Roles of Visual Realism and Perceived Humanness. *Mingjun Zhai, Lai Wei, Zhe Gao, Jiaxin Chen, Yongqing Li, Ping Li.* *Computers & Education.*
- Beats and pointing with English *not*, *n't* and *no* across grammatical class and medium. *Lai Wei, Pangrui Xing, Kenny K. N. Chow.* *Gesture Studies.*
- Culturally grounded but socially malleable: Cooperative dialogue recalibrates abstract concept representations. *Mingjun Zhai, Lai Wei, Yingying Peng, Ping Li.* *Communications Psychology* (Nature Portfolio).

Recognition

- 2023 Invited presentation, ChinaVis 2023 (Visualization and Visual Analytics)
- 2021 Best Presenter Award in the 12th PhD Colloquium on Design Research, hosted by Tsinghua University's Academy of Arts & Design
- 2019 Product design "Continuing" primary selection to The 13th National Exhibition of Fine Arts, China
- 2016 Animation *In Black, Adverse Reaction* won the second place of the best 2D Animation Animex Awards 2016, NY.
- 2016 Animation *In Black, Adverse Reaction* were selected Semi-Finalist International Open Film Festival (IOFF), NY
- 2015 Animation *In Black* won the second place of the best 2D Animation in The World Animation Celebration, CA.
- 2015 Animation *In Black* official selection to British Animation Awards, London.

- 2015 Animation *In Black* official selection to Semifinalist Adobe Design Achievement Award.
- 2015 Animation *In Black* official selection to Taiwan International Children's Film Festival, Taiwan.
- 2015 Animation *In Black* official selection to China Independent Animation Film Forum, Nanjing.
- 2015 Animation *In Black* official selection to Lascitolablu ENJOY! Animation Film Festival, Italy.
- 2015 Animation *In Black* official selection to AnimaSyros International Animation Festival, Greece.
- 2015 Animation *In Black* official selection to India International Children's Film Festival, India.
- 2015 Animation *In Black* official selection to Near Nazareth NN Festival.
- 2015 Animation *In Black, Adverse Reaction* official selection to Blackbird Film Fest.
- 2015 Animation *In Black* official selection to Chinese Women Film Fest.
- 2015 Animation *In Black* official selection to Queen City Film Festival.
- 2015 Animation *In Black* official selection to Visionaria Film Fest.
- 2015 Animation *Adverse Reaction* official selection to Title Ruse Film Festival.
- 2014 Animation *Adverse Reaction* official selection to IN. S. A. N. E. Animation Film Festival.
- 2012 Animation *Bear Has Child* mentioned award in China Graduate Animation Competition, Beijing.
- 2012 Animation *Bear Has Child* mentioned award in Beijing Film Academy.
- 2012 Animation *Bear Has Child* mentioned award in Animation Competition, Beijing.
- 2009 Won the third prize of MLBTM graffiti Competition.
- 2008-2012 Won the Outstanding student.
- 2008-2012 Won the Third-class scholarship

Exhibition

- **A Technological Perspective on Fashion Design, First China Fashion Industry Innovation and Entrepreneurship Conference**, Hangzhou, 2019
- **'iSTART Children's Art Festival'** at **A4 Museum**, Group Exhibition, Chengdu, 2019
- **'Independent Animation Film Screening'** at **The Post Mountain Gallery** Group Exhibition, Beijing, 2019
- **'24 Frames Childhood'** at **Chengdu Contemporary Image Museum** Group Exhibition, Chengdu, 2019
- **'+8 Chinese Independent Animation Screening'** at **A4 Art Museum**, Group Exhibition, Chengdu, 2019
- **Taiwan International Children's Film Festival 2016**, Tour Exhibition, Taiwan, 2016.5-2015.8
- **'CUT'in The Old Operating Theatre, Museum Herb Garret, London**, Group Exhibition, London, 2012

Conferences

- 2026 *Presenter* ACM Creativity & Cognition (CC '26)
- 2026 *Poster* CogSci 2026
- 2025 *Poster* International Society for Gesture Studies (ISGS '25)
- 2025 *Poster* CogSci 2025
- 2023.10 *Presenter* The 2023 Conference on Computer Supported Cooperative Work and Social Computing, Minneapolis

- 2023.10 *Presenter* The 10th Congress of the International Association of Societies of Design Research, Milano
- 2023.7 *Invited speaker* The 10th China Visualization and Visual Analytics Conference, Chongqing
- 2022.11 *Presenter* International Conference on Advances in Mobile Computing and Multimedia Intelligence, Virtual
- 2021.12 *Presenter* The 9th Congress of the International Association of Societies of Design Research, Hong Kong
- 2021.4 *Presenter* The 12th PhD Colloquium on Design Research, Beijing
- 2019.12 *Presenter* 'Wide Vision' International Forum of Visual Culture 2019: The View of Cross-disciplinarity, Guangzhou
- 2018.11 *Invited speaker* Delivered a speech in Animation Scholars Roundtable Forum (Chengdu) and Western Universities Students Animation Festival Academic Proseminar
- 2018.11 *Invited speaker* The 3rd Annual Conference of Chinese Animation Studies, Chengdu
- 2018.10 *Presenter* Delivered a speech in China Youth Animation Scholars Forum, Beijing
- 2018.9 *Presenter* The 3rd International Conference on Education Research and Reform, Macao

Expertise

- **Languages:** Mandarin (*native*), English (*fluent*).
- **Research Methods:** Mixed methods, Lab experiment, Discourse analysis, Multimodal discourse analysis, Case study, Semi-structured interview, Survey, Thematic analysis, Speech analysis in phonetics, Corpus analysis.
- **Design Methods:** User-center design, User Experience Design, User Test, Participatory Design, Laddering interview.
- **Research Tools:** Eye tracking, EyeLink, ELAN, CLAN, SPSS, R, Praat, NVivo, Prism 9, VOSviewer, Microsoft suite.
- **CAD Tool:** Adobe suite, TVPaint, Final Cut Pro, Nomad, Reality Composer, Procreate, Cinema 4D, Figma.