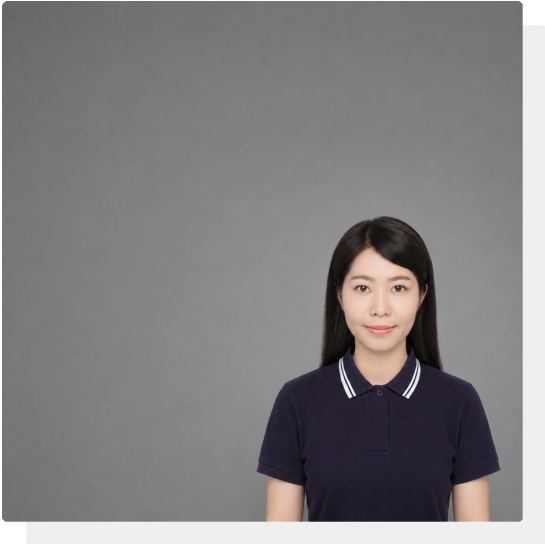




Yu-Yi Zheng

ZHENG Yu-Yi is an interdisciplinary researcher in cultural heritage, user research, spatial art design and quantitative evaluation. She is currently pursuing doctoral study in Cultural Heritage and Anthropology at Macao Polytechnic University.

Her work examines how people understand, accept and interact with technological spaces, digital media and intelligent agents. She connects experimental design, data collection, multi-criteria modelling and English journal publication into evidence-ready research outputs.

Research interests: cultural heritage communication; human-computer interaction; virtual heritage; embodied cognition; user experience evaluation; MADM/MCDM; Q methodology; FDM; DEMATEL-ANP; eye-tracking research.

Ph.D. candidate, Macao Polytechnic University

M.A. Environmental Art Design Theory and Practice, South China Normal University

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Academic Qualification

Ph.D. Candidate in Cultural Heritage and Anthropology, Faculty of Humanities and Social Sciences, Macao Polytechnic University 澳門理工大學

2024.09-present

Research methods include multi-attribute decision making (MADM/MCDM), Q methodology, fuzzy Delphi method (FDM), and DEMATEL-ANP (DANP).

Research direction: exploring how spatial art design, digital media and human-computer interaction can provide new perspectives and solutions for cultural heritage protection and transmission.

Master of Environmental Art Design Theory and Practice, South China Normal University 華南師範大學

2020.09-2023.06 · Full-time master's program

Focused on environmental art design theory and practice, with multi-attribute decision-making methods as a core research approach.

Academic Appointments and Research Positioning

- Youth Committee Member, Macau Social Science Association, 2024.
- Youth Committee Member, Macau Documentation and Information Society, 2025.
- Interdisciplinary researcher centered on user research and quantitative evaluation methods, with a sustained focus on how users understand, accept and interact with technological spaces, digital media and intelligent agents.
- Published six journal papers, including three SCI-indexed and two EI-indexed papers, with 34 Google Scholar citations; four additional first-author manuscripts are under review or revision.
- Current doctoral research uses 4E embodied cognition theory to study user cognitive types, experiential value co-creation and well-being outcomes in virtual heritage settings.

Method Toolkit

- Multi-attribute decision-making models (MADM/MCDM), Q methodology, fuzzy Delphi method (FDM), DEMATEL-ANP (DANP), semi-structured interviews and focus groups.

- Eye-tracking and user experience evaluation for understanding acceptance, interaction effectiveness and measurable outcomes in digital media, spatial design and human-computer interaction contexts.
- The current contribution to robotics and intelligent systems is empirical evaluation: translating user acceptance and interaction effectiveness into measurable, testable and publishable evidence.

Selected Publications - First Author

Rethinking urban spatial resource allocation during public health emergencies

Zheng, Y.-Y., Lin, J.-Y., Zhao, L.-C., Xiong, L., Zhu, B.-W., and Tzeng, G.-H. (2025). Assessing comfortable quarantine environment in Guangzhou hotels. *Journal of Asian Architecture and Building Engineering*, 24(3), 2017-2033. SCI/EI indexed, IF 2.6.

Analysis on the microclimate landscape design of South China gardens

Zheng, Y.-Y., and Chang, N. (2021). Evidence from Qinghui Garden in Guangdong Province. *Art and Design*, 4(3), 44-58. DOI: 10.31058/j.ad.2021.43006.

Analysis on the integration and innovation of Lingnan art in environmental design education

Zheng, Y.-Y., and Chang, N. (2022). *Education Journal*, 5(3), 22-28. DOI: 10.31058/j.edu.2022.53004.

Selected Publications - Co-authored

How psychological and cultural factors drive donation behavior in cultural heritage preservation

Zhao, L., Zhang, H., Li, R., Lin, J., Xiong, L., Zheng, Y.-Y.*, and Zhang, H. (2025). Construction of the cultural generativity behavior model. *npj Heritage Science*, 13(1), 28. Corresponding author.

Ex-ante evaluation model of urban renewal projects for sustainability potential towards TOD and AUD

Zhao, L.-C., Zheng, Y.-Y., Lin, J.-Y., Shen, K., Li, R.-T., Xiong, L., Zhu, B.-W., and Tzeng, G.-H. (2024). *International Journal of Information Technology and Decision Making*, 23(6). SCI/EI indexed, IF 1.9. Second author.

Evaluating sustainable development potential of characteristic towns

Lin, J.-Y., Zhao, L.-C., Zheng, Y.-Y., Du, Q.-K., Xiong, L., Zhu, B.-W., and Tzeng, G.-H. (2023). *Journal of Environmental and Public Health*, 2023(1), 9065729. Third author.

Academic Projects

Spatial improvement of high-density urban gardens and green spaces in the Pearl River Delta 珠江三角洲地區高密度城市花園和綠地的空間提升研究

Guangzhou, China, 2020. Participated in field investigation, research data collection and research-result writing.

Spatial improvement of high-density urban garden green spaces in the Pearl River Delta 珠三角地區高密度城市園林綠地空間提升

Guangzhou, China, 2021. Participated in field investigation, research data collection and research-result writing.

Monograph: Landscape Art of Micro Green Spaces in High-density Cities of the Pearl River Delta 珠三角高密度城市微綠地景觀藝術

Guangzhou, China, 2021. Contributed to the writing of Chapter 3.

Practice Projects

Cultural tourism project: Integrated and Reborn - immersive ecological planning and design for Ganzhoukeng, Haifeng County, Guangdong

廣東省海豐縣「融入與重生」柑洲坑沉浸式體驗生態規劃設計

Shanwei, China, 2020. Responsible for early-stage planning including city overview, location analysis, development background and regional market analysis.

Cultural tourism project: Environmental renovation design for Boge Wu Village, Lushan County, Pingdingshan 平頂山魯山縣鶉鵒吳村環境改造設計

Henan, China, 2021. Responsible for scheme design including business format analysis, functional zoning distribution, spatial analysis and plan layout.

Exhibition space: Plant display installation for Tingxu Zaowu Pavilion at Guangzhou Construction Expo 廣州建博會「庭序造物」館植物展示裝置呈現

Guangzhou, China, 2023. Responsible for exhibition-space scene creation, including scene arrangement, spatial atmosphere, aesthetics and emotional communication.

Awards

- Second Prize, 4th National Youth Cup Art Design Competition, for the Ganzhoukeng immersive ecological planning scheme, December 2020.

- First-Class Academic Scholarship, South China Normal University, top 15%, October 2021.

- Second-Class Academic Scholarship, South China Normal University, top 20%, October 2022.
- First Prize, Beautiful China National Ecological Culture Fine Project collection and National Ecological Environment Creative Design Achievement Exhibition, for Boge Wu rural environment renovation, May 2022.