

Yueyuan (Mercury) ZHENG

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EDUCATION

2024 (expected)	Doctor of Philosophy (Ph.D.) in Cognitive Psychology University of Hong Kong (HKU), Hong Kong; Supervisor: Dr. Janet Hsiao
2021	Master of Philosophy (M.Phil.) in Cognitive Psychology University of Hong Kong, Hong Kong; Supervisor: Dr. Janet Hsiao
2018	Bachelor of Social Sciences (B.S.S.), major in Psychology University of Hong Kong, Hong Kong

AWARDS AND HONORS

2023	Erik Kvan Postgraduate Scholarship	HKU
2022	Student Award	IEEE TCLT, 22 nd ICALT
2021	Graduate Research Publication Award, 2 nd Prize	HKU Department of Psychology
2020	Outstanding Oral Presentation Award	HKU Department of Psychology
2019	Student Travel Award	Cognitive Science Society
2019-2024	Research Postgraduate Scholarship, in MPhil & PhD	HKU
2016-2017	JASSO Scholarship	Japan Student Service Organization
2015	Summer Enrichment Scholarship	HK Government

PEER-REVIEWED PUBLICATIONS

(*: corresponding author, #: co-first authorship, -: representative papers)

1. **Zheng, Y.**, Ye, X., & Hsiao, J. H. (2019). Does video content facilitate or impair comprehension of documentaries? The effect of cognitive abilities and eye movement strategy. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society*, 1283-1289. Montreal, QB: Cognitive Science Society. (accept rate: 25.3%) [**Student Travel Award**]
2. **Zheng, Y.**, & Hsiao, J. H. (2020). Audiovisual Information Processing in Emotion Recognition: An Eye Tracking Study. In S. Denison, M. Mack, Y. Xu, & B.C. Armstrong (Eds.), *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*, 2024-2630. Cognitive Science Society.
3. Que, Y., **Zheng, Y.**, Hsiao, J. H., Hu, X. (2020). Exploring the Effect of Personalized Background Music on Reading Comprehension. *Proceedings of the Jointed Conference on Digital Libraries (JCDL) 2020* (pp. 57-66). Association for Computing Machinery, New York, NY, USA. (accept rate: 31.1%)
4. Hsiao, J. H.*, Lan H., **Zheng, Y.**, & Chan, A. B. (2021). Eye Movement analysis with Hidden Markov Models (EMHMM) with co-clustering. *Behavior Research Methods*, 1-14. <https://rdcu.be/cjLZJ> (IF = 6.242, rank 1/13 in Psychology, Mathematical; 5/91 in Psychology, Experimental)
5. Hsiao, J. H.*, An, J., **Zheng, Y.**, & Chan, A. B. (2021). Do portrait artists have enhanced face processing abilities? Evidence from hidden Markov modeling of eye movements. *Cognition*, 211, 104616. (IF = 3.650, rank 18/91 in Psychology, Experimental)
6. Turbett, K.*, Jeffery, L., Bell, J., Digges, A., **Zheng, Y.**, Hsiao, J. H., Palermo, R. (2021). Serial Dependence of Facial Identity for Own- and Other-Race Faces. *Quarterly Journal of Experimental Psychology*, 17470218211059430. (IF = 2.143, rank 55/77 in Psychology)
7. **Zheng, Y.**, Ye, X., & Hsiao, J. H.* (2022). Does adding video and subtitles to an audio lesson facilitate its comprehension?. *Learning and Instruction*, 101542. (IF = 6.636, rank 13/332 in Developmental and Educational Psychology)

8. Qiu, L., Yang, Y., Cao, C. C., **Zheng, Y.**, Ngai, H. H. T., Hsiao, J. H., & Chen, L. (2022). Generating Perturbation-based Explanations with Robustness to Out-of-Distribution Data. The ACM Web Conference 2022 (under Web4Good special track) (accept rate: 24%).
9. **Zheng, Y.**, Que, Y., Hu, X., Hsiao, J. H. (2022). Predicting Reading Performance based on Eye Movement Analysis with Hidden Markov Models. *Proceedings of the 22nd IEEE International Conference on Advanced Learning Technologies (ICALT)*. [**Student Award**] [**Best Full Paper Award Nomination**]
10. **Zheng, Y.**, Chen, D., Hu, X., Hsiao, J. H. (2022). The impact of mask use on social categorization. *Proceedings of the 44th Annual Conference of the Cognitive Science Society*, 2024-2630. Cognitive Science Society.
11. Yang, Y., **Zheng, Y.**, Deng, D., Zhang, J., Huang, Y., Yang, Y., Hsiao, J. H., & Cao, C.* (2022). HSI: Human Saliency Imitator for Benchmarking Saliency-based Model Explanations. *The Tenth AAAI Conference on Human Computation and Crowdsourcing (HCOMP)*. (accept rate: 29.8%)
12. Luo, X., Gu, J., **Zheng, Y.**, & Zhou, X.* (2022) Making a saccade enhances Stroop and Simon conflict control. *Attention, Perception, & Psychophysics*, 84(3), 795-814. (IF = 2.199, rank 57/77 in Psychology)
13. Hsiao, J. H.*, An, J., Hui, V. K. S., **Zheng, Y.**, & Chan, A. B. (2022). Understanding the role of eye movement consistency in face recognition and autism through integrating deep neural networks and hidden Markov models. *npj Science of Learning*, 7(1), 1-13. (IF = 5.513, rank 8/91 in Psychology, Experimental; rank 21/270 in Education & Educational Research)
14. **Zheng, Y.**, & Hsiao, J. H.* (2023). Differential audiovisual information processing in emotion recognition: An Eye Tracking Study. *Emotion*, 23(4), 1028. (IF = 5.564, rank 7/91 in Psychology, Experimental)
15. Que, Y., **Zheng, Y.**, Hsiao, J. H., & Hu, X.* (2023). Studying the effect of self-selected background music on reading task with eye movements. *Scientific Reports*, 13(1), 1704. (IF = 4.997, rank 19/74 in Multidisciplinary Sciences)
16. **Zheng, Y.**, de la Harpe, S., Yang, A. Y., Hayward, W. G., Palermo, R., Hsiao, J. H. (2023). Cultural Differences in the Effect of Mask Use on Face and Facial Expression Recognition. *Proceedings of the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.
17. Qi, R., **Zheng, Y.**, Yang, Y., Zhang, J., & Hsiao, J. H. (2023). Individual differences in explanation strategies for image classification and implications for explainable AI. *Proceedings of the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.
18. Hsiao, J. H.*, Chan, K. S., Chan, A., **Zheng, Y.**, & Lau, K. M. (submitted). Eye movement consistency in global-local perceptual processing predicts schizotypy.
19. Qi, R.#, **Zheng, Y.#**, Yang, Y., Cao, C. C., & Hsiao, J. H. (under review). Explanation Strategies for Image Classification in Humans vs. Current Explainable AI.
20. **Zheng, Y.**, Que, Y., Hu, X., Hsiao, J. H.* (in preparation). Predicting Reading Performance based on Eye Movement Analysis with Hidden Markov Models.
21. Deng D., Yang, Y., **Zheng, Y.**, Cao, C., & Shi, B. E.*. (submitted). Joint Mitigation of Composition and Annotation Biases for Fairer Emotion Recognition.

Abstract Publications in Peer-Reviewed Conference Proceedings

- C1. Hsiao, J., Chan, K. W. S., Chan, A., **Zheng, Y.**, Lau, K. M., Tsang, H. L. M. (2021). Eye movement consistency in global-local perceptual processing predicts schizotypy. *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*, 3229. Montreal, QB: Cognitive Science Society.

Preprints:

- P1. Qiu, L., Yang, Y., Cao, C. C., Liu, J., **Zheng, Y.**, Ngai, H. H. T., Hsiao, J. H., & Chen, L. (2021). Resisting Out-of-Distribution Data Problem in Perturbation of XAI. <https://arxiv.org/abs/2107.14000>.
- P2. Qi, R.#, **Zheng, Y.#**, Yang, Y., Cao, C. C., & Hsiao, J. H. (2023). Explanation Strategies for Image Classification in Humans vs. Current Explainable AI. <https://arxiv.org/abs/2304.04448>.

PRESENTATIONS/ TALKS

Oral Presentations at International Conferences

- Jul. 26th, 2019 *Does video content facilitate or impair comprehension of documentaries?* 41st Annual Conference of the Cognitive Science Society, Montreal, Canada. **[Student Travel Award Winner]**
- July 27th, 2021 *Eye movement consistency in global-local perceptual processing predicts schizotypy.* CogSci2021 Hong Kong Meetup & Symposium.
- July 3rd, 2022 *Predicting Reading Performance based on Eye Movement Analysis with Hidden Markov Models.* 22nd IEEE ICALT. **[Student Award Winner]**
- July 22nd, 2022 *The impact of mask use on social categorization.* CogSci2022 Hong Kong Meetup & Symposium.
- July 29th, 2022 *The impact of mask use on social categorization.* 44th Annual Conference of the Cognitive Science Society

Poster Presentations at Conferences

- Jul. 28th, 2020 *Audiovisual Information Processing in Emotion Recognition: An Eye Tracking Study.* 42nd Annual Conference of the Cognitive Science Society.
- June 29th, 2023 *Cultural Differences in the Effect of Mask Use on Face and Facial Expression Recognition.* Poster presented at the 45th Annual Conference of the Cognitive Science Society.

Other Presentations/ Talks

- May 2nd, 2019 *Does video content facilitate or impair comprehension of documentaries?* Oral presentation at 5th Annual Departmental Research Postgraduate Symposium, Department of Psychology, HKU.
- May 5th, 2020 *Audiovisual Information Processing in Emotion Recognition: An Eye Tracking Study.* Oral presentation at 6th Annual Departmental Research Postgraduate Symposium, Department of Psychology, HKU. **[Outstanding Oral Presentation Award Winner]**
- Mar. 26th, 2021 *Eye movement pattern and consistency predict passage reading performance of English as Second Language (ESL) Learners.* Brown Bag Seminar, Department of Psychology, HKU.
- Aug. 12th, 2023 *Cultural differences in the Effect of Mask Use on Face and Facial Expression Recognition.* CogSci2023 Shanghai Meetup & Symposium.

TEACHING EXPERIENCE

Teaching assistant of the following courses at HKU

2019 Fall	PSYC1004	Introduction to Quantitative Methods in Psychology
2020 Spring	PSYC2066	Foundations of Cognitive Science
2022 Spring	PSYC1001	Introduction to Psychology
2023 Fall	PSYC 2102	Foundations of Neuroscience

SERVICES

2022-now	Committee member	Cognitive Science Society, International Committee
2019-2023	Eye-tracking lab manager	Department of Psychology, HKU
2019-2021	Lab manager	Attention, Brain and Cognition Lab
2015-2018	Student mentor & academic advisor	HKU CSSAUD

VISITING EXPERIENCE

2023	University of Western Australia	Visiting Research Student
2016-2017	University of Tokyo	University-Wide Exchange
2016	University of Cambridge	Pembroke-King's Program
2015	University of California, Irvine	Summer Program