Curriculum Vitae
Janet Hui-wen Hsiao

Office Address:
Division of Social Science
Hong Kong University of Science & Technology
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ACADEMIC QUALIFICATIONS

Ph.D., Informatics, University of Edinburgh, June 2006

Master of Science, Computing Science, Simon Fraser University, August 2002

Bachelor of Science, Computer Science & Information Engineering, National Taiwan University, June 1999

ACADEMIC APPOINTMENTS

Professor, Division of Social Science, Hong Kong University of Science & Technology, Feb. 2024 - now

Professor, Department of Psychology, University of Hong Kong, Nov. 2023 – Jan. 2024

Steering Committee Member, Institute of Data Science, University of Hong Kong, Aug. 2022 – Jan. 2024

Head, Department of Psychology, University of Hong Kong, Oct. 2020 – Sept. 2023

Principal Investigator, The State Key Laboratory of Brain and Cognitive Sciences, University of Hong Kong, Sept. 2019 – Jan. 2024

Associate Professor, Department of Psychology, University of Hong Kong, Jan. 2015 – Oct. 2023

Assistant Professor, Department of Psychology, University of Hong Kong, Jan. 2009 – Dec. 2014

Postdoctoral Researcher, Department of Computer Science & Engineering, University of California San Diego, Dec. 2005 – Dec. 2008

EXTERNAL HONOURS AND AWARDS

Fellow, the Cognitive Science Society ("Fellows of the Cognitive Science Society are individuals whose research has exhibited sustained excellence and had sustained impact on the Cognitive Science community") 2023

Early Career Award (Top 5% of the Early Career Scheme), the Research Grant Council of Hong Kong — 2012

Best Language Modelling Paper Prize ($1,000), the Twenty Eighth Annual Conference of the Cognitive Science Society, Vancouver, Canada. — 2006

CCK Fellowships for Ph.D. Dissertations (12,000 EUR), Chiang Ching-kuo Foundation for International Scholarly Exchange, Taiwan. — 2005

RESEARCH & SCHOLARSHIP

Book and Journal Publications

Book Chapter:

Cottrell, G. W., & Hsiao, J. H. (2011). Neurocomputational models of face processing. In Calder, A. J., Rhodes, G., Haxby, J. V., & Johnson, M. H. (Eds.), *Oxford Handbook of Face Perception* (pp. 402-423). Oxford: Oxford University Press.

International Journal Articles:

*Corresponding author; *my student, research assistant, or postdoc as co-author in italics*

J1. *Lam, S.*, *Li, Cheng*, Hsiao, J. H., & Lau, E. Y. Y.* (accepted). A Sleepless Night Disrupts the Resolution of Emotional Conflicts: Behavioural and Neural Evidence. *Journal of Sleep Research.*

J2. *Zhong, N.*, Hsiao, J. H., Zhou, G., & Hayward, W.* (accepted). Association of idiosyncratic eye-movement patterns with holistic processing of faces as measured by the composite face effect and the face inversion effect. *Visual Cognition*.

J3. *Liu, G.*, Wen, Y., Hsiao, J. H., Zhang, D., Tian, L.*, & Zhou, W.* (accepted). EEG-based familiar and unfamiliar face classification using filter-bank differential entropy features. *IEEE Transactions on Human-Machine Systems*.

J4. *Teng, X. S.*, Hsiao, J. H., & Lo, Y. Y.* (2023). Cognitive processes and strategies of bilingual students when attempting assessments in L2. *Journal of Immersion and Content-based Language Education*. https://doi.org/10.1075/jicb.23011.ten

J5. Sun, R., Cheng, A., *Chan, C.*, Hsiao, J. H., Private, A., Gao, J., Fong, C., Ding, R., & Tang, A.* (2023). Tracking Gaze Position from EEG: Exploring the Possibility of an EEG-based Virtual Eye-Tracker. *Brain & Behavior*, *13*(1), e3205.

J6. Zhang, F., Loo, B. P. Y.*, Lan, H., Chan, A. B., & Hsiao, J. H. (2023). Jobs-housing Balance and Travel Patterns among Different Occupations as Revealed by Hidden Markov Mixture Models: The Case of Hong Kong. *Transportation*. https://doi.org/10.1007/s11116-023-10390-4

J7. *Liu, G.**, Hsiao, J. H, Zhou, W., & Lan, T. (2023). MartMi-BCI: A Matlab-based Real-Time Motor Imagery Brain-Computer Interface Platform. *SoftwareX*, 101371. https://doi.org/10.1016/j.softx.2023.101371

J8. Lan, H., Liu, Z., Hsiao, J. H., Yu, D., & Chan, A. B.* (2023). Clustering Hidden Markov Models with Variational Bayesian Hierarchical EM. *IEEE Transactions on Neural Networks and Learning Systems*, *34*(3), 1537-1551. https://doi.org/10.1109/TNNLS.2021.3105570

J9. Que, Y., *Zheng, Y.*, Hsiao, J. H., & Hu, X.* (2023). Studying the Effect of Self-selected Background Music on Reading Comprehension with Eye Movements. *Scientific Reports*, *13*, 1704. https://doi.org/10.1038/s41598-023-28426-1

J10. *Zheng, Y.* & Hsiao, J. H.* (2023). Differential audiovisual information processing in emotion recognition: An eye-tracking study. *Emotion*, 23(4), 1028-1039. https://doi.org/10.1037/emo0001144

J11. Hsiao, J. H.*, & Chan, A. B. (2023). Visual attention to own- vs. other-race faces: Perspectives from learning mechanisms and task demands. *British Journal of Psychology*, *114*(S1), 17-20. https://doi.org/10.1111/bjop.12647

J12. Wang, L., Hsiao, J. H., Chan, A. B., Cheung, J., Hung, S., & Au, T. K.* (2023). On Becoming Socially Anxious: Toddlers' Attention Bias for Fearful Faces. *Developmental Psychology*, 59(2), 353-363. https://doi.org/10.1037/dev0001472

J13. 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*, 28. https://doi.org/10.1038/s41539-022-00139-6

J14. Tso, R. V. Y.*, Chui, C. O., & Hsiao, J. H.* (2022). How does face mask in COVID-19 pandemic disrupt face learning and recognition in adults with autism spectrum disorder? *Cognitive Research: Principles & Implications*, *7*, 64. https://doi.org/10.1186/s41235-022-00407-4

J15. *Liao, W.*, *Li, S. T. K.*, & Hsiao, J. H.* (2022). Music reading experience modulates eye movement pattern in English reading but not in Chinese reading. *Scientific Reports*, *12*, 9144. https://doi.org/10.1038/s41598-022-12978-9

J16. Cho, V., Hsiao, J. H., Chan, A. B., Ngo, H., King, N., & Anthonappa, R.* (2022). Eye movement analysis of children's attention for midline diastema. *Scientific Reports*, *12*, 7462. https://doi.org/10.1038/s41598-022-11174-z

J17. *Tso, R. V. Y.**, Au, T. K., & Hsiao, J. H. (2022). An inverted u-shape developmental trend of holistic processing in visual expertise: the case of Chinese character recognition. *Cognitive Research: Principles and Implications*, *7*, 39. https://doi.org/10.1186/s41235-022-00389-3

J18. Cho, V., Hsiao, J. H., Chan, A. B., Ngo, H., King, N. M., & Anthonappa, R.* (2022). Understanding children's attention to traumatic dental injuries using eye-tracking. *Dental Traumatology*, *38*(5), 410-416. https://doi.org/10.1111/edt.12751

J19. Hsiao, J. H.*, *Liao, W.*, & Tso, R. V. Y. (2022). Impact of mask use on face recognition: An eye tracking study. *Cognitive Research: Principles and Implications*, *7*, 32. https://doi.org/10.1186/s41235-022-00382-w

J20. Cho, V., Hsiao, J. H., Chan, A. B., Ngo, H., King, N. M., & Anthonappa, R.* (2022). Understanding children's attention to dental caries through eye-tracking. *Caries Research*, *56*(2), 129-137. https://doi.org/10.1159/000524458

J21. Liu, Z., Yu, L., Hsiao, J. H., & Chan, A. B.* (2022). PRIMAL-GMM: PaRametrIc MAnifold Learning of Gaussian Mixture Models. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, *44*(6), 3197-3211. https://doi.org/10.1109/TPAMI.2020.3048727

J22. Chan, S. K. W.*, Hsiao, J. H., Wong, A. O. Y., Liao, Y., Suen, Y., Yan, E. W. C., Poon, L.-T., Siu, M. W., Hui, C. L. M., Chang, W., C., Lee, E. H. M., & Chen, E. Y. H. (2022). Explicit and implicit mentalization of patients with first-episode schizophrenia: a study of self-referential gaze perception and eye movement analysis using Hidden Markov Models. *European Archives of Psychiatry and Clinical Neuroscience*. https://doi.org/10.1007/s00406-022-01383-y

J23. *Zheng, Y.*, *Ye, X.*, & Hsiao, J. H.* (2022). Does adding video and subtitles to an audio lesson facilitate its comprehension? *Learning & Instruction*, *77*, 101542. https://doi.org/10.1016/j.learninstruc.2021.101542

J24. *Chan, F. H. F.*, Suen, H., Chan, A. B., Hsiao, J. H., & Barry, T. J.* (2022). The effects of attentional and interpretation biases on later pain outcomes among younger and older adults: a prospective study. *European Journal of Pain*, *26*(1), 181-196. https://doi.org/10.1002/ejp.1853

J25. Lee, H. H., Chen, Z. L., Yeh, S. L.*, Hsiao, J. H., & Wu, A. Y. (2021). Mind-wandering as revealed by eye movement analysis with hidden Markov models. *Sensors*, 21(22), 7569. https://doi.org/10.3390/s21227569

J26. 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*. https://doi.org/10.1177/17470218211059430

J27. Hsiao, J. H., Chan, A. B., *An, J.*, Yeh, S.-L., & Jingling, L.* (2021). Understanding the collinear masking effect in visual search through eye tracking. *Psychonomic Bulletin & Review, 28*(6), 1933-1943. https://doi.org/10.3758/s13423-021-01944-7

J28. 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. https://doi.org/10.1016/j.cognition.2021.104616

J29. 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, 53,* 2473–2486. https://doi.org/10.3758/s13428-021-01541-5

J30. Chan, S. K. W.*, *Liu, T.*, Wong, A. O. Y., Wong, G. H. Y., Hsiao, J. H., Hui, C. L. M., Chang, W. C., Lee, E. H. M., & Chen, E. Y. H. (2021). Self-referential gaze perception of patients with schizophrenia and its relationship with symptomatology and cognitive functions. *Schizophrenia Research*, *228*, 288-294. https://doi.org/10.1016/j.schres.2020.12.034

J31. Loo, B. P. Y.*, Zhang, F., Hsiao, J. H., Chan, A. B., & Lan, H. (2021). Interdisciplinary innovations in urban mobility research: From Psychology to Geography. *Chinese Geographical Science*, *31*(1), 1-13. https://doi.org/10.1007/s11769-021-1173-0

J32. Sun, R., *Chan, C. Y. H.*, Hsiao, J. H., & A., Tang* (2021). Validation of SOBI-DANS method for automatic identification of horizontal and vertical eye movement components from EEG. *Psychophysiology*, *58*(2), e13731. https://doi.org/10.1111/psyp.13731

J33. An, J., & Hsiao, J. H.* (2021). Modulation of mood on eye movement pattern and performance in face recognition. *Emotion, 21*(3), 617-630. https://doi.org/10.1037/emo0000724

J34. *Chan, F. H. F.*, Jackson, T., Hsiao, J. H., Chan, A. B., & Barry, T. J.* (2020). The interrelation between interpretation biases, threat expectancies and pain-related attentional processing. *European Journal of Pain*, *24*(10), 1956-1967. https://doi.org/10.1002/ejp.1646

J35. *Chan, F. H. F.*, Barry, T. J.*, Chan, A. B., & Hsiao, J. H. (2020). Understanding visual attention to face emotions in social anxiety using hidden Markov models. *Cognition and Emotion*, *34*(8), 1704-1710. https://doi.org/10.1080/02699931.2020.1781599

J36. *Chan, F. H. F.*, Suen, H., Hsiao, J. H., Chan, A. B., & Barry, T. J.* (2020). Interpretation biases and visual attention in the processing of ambiguous information in chronic pain. *European Journal of Pain*, *24*(7), 1242-1256. https://doi.org/10.1002/ejp.1565

J37. *Tso, R. V. Y.*, Chan, R. T. C., & Hsiao, J. H.* (2020). Holistic but with reduced right-hemisphere involvement: The case of dyslexia in Chinese character recognition. *Psychonomic Bulletin & Review*, *27*(3), 553-562. https://doi.org/10.3758/s13423-020-01721-y

J38. *Chuk, T.*, Chan, A. B.*, Shimojo, S., & Hsiao, J. H.* (2020). Eye movement analysis with switching hidden Markov models. *Behavior Research Methods*, *52*(3), 1026-1043. https://doi.org/10.3758/s13428-019-01298-y

J39. Jiang, M.*, *Wong, S. K. M.*, *Chung, H. K. S.*, Sun, Y., Hsiao, J. H., Sui, J., & Humphreys, G. (2019). Cultural orientation of self-bias in perceptual matching. *Frontiers in Psychology*, *10*:1469. https://doi.org/10.3389/fpsyg.2019.01469

J40. *Li, T. K.*, Chung, S., & Hsiao, J. H.* (2019). Music-reading expertise modulates the visual span for English letters but not Chinese characters. *Journal of Vision*, *19*(4):10, 1-16. https://doi.org/10.1167/19.4.10

J41. *Zhang, J.*, Chan, A. B., Lau, E. Y. Y., & Hsiao, J. H.* (2019). Individuals with insomnia misrecognize angry faces as fearful faces while missing the eyes: An eye-tracking study. *Sleep*, *42*(2), zsy220. https://doi.org/10.1093/sleep/zsy220 [Editor's Choice] [Commentary on this article from Umair Akram: https://doi.org/10.1093/sleep/zsz012]

J42. *Zhang, J.**, Lau, E. Y. Y., & Hsiao, J. H. (2019). Using emotion regulation strategies after sleep deprivation: ERP and behavioral findings. *Cognitive, Affective, and Behavioral Neuroscience*, *19*(2), 283-295. https://doi.org/10.3758/s13415-018-00667-y

J43. *Chung, H. K. S.*, *Leung, J. C. Y.*, *Wong, V. M. Y.*, & Hsiao, J. H.* (2018). When is the right hemisphere holistic and when is it not? The case of Chinese character recognition. *Cognition*, *178*, 50-56. https://doi.org/10.1016/j.cognition.2018.04.022

J44. *Li, T. K.*, & Hsiao, J. H.* (2018). Music reading expertise modulates hemispheric lateralization in English word processing but not in Chinese character processing. *Cognition, 176*, 159-173. https://doi.org/10.1016/j.cognition.2018.03.010

J45. *Liu, T.*, Yeh, S. L., & Hsiao, J. H.* (2018). Transfer of the left-side bias effect in perceptual expertise: The case of simplified and traditional Chinese character recognition. *PLOS ONE, 13*(4): e0194405. https://doi.org/10.1371/journal.pone.0194405

J46. Thorup, B., Crookes, K.; Chang, P.P.W., Burton, N., Pond, S., *Li, T. K.*, Hsiao, J. H., & Rhodes, G.* (2018). Perceptual experience shapes our ability to categorise faces by national origin: A new other-race effect. *British Journal of Psychology*, *109*(3), 583-603. https://doi.org/10.1111/bjop.12289

J47. *Zhang, J.*, Lau, E. Y. Y.*, & Hsiao, J. H. (2019). Sleep deprivation compromises resting-state emotional regulatory processes: An EEG study. *Journal of Sleep Research*, 28(3): e12671. https://doi.org/10.1111/jsr.12671

J48. *Chan, C. Y. H.*, Chan, A. B., Lee, T. M. C., & Hsiao, J. H.* (2018). Eye movement patterns in face recognition are associated with cognitive decline in older adults. *Psychonomic Bulletin & Review*, *25*(6), 2200-2207. https://doi.org/10.3758/s13423-017-1419-0

J49. Coutrot, A.*, Hsiao, J. H., & Chan, A. B. (2018). Scanpath modeling and classification with Hidden Markov Models. *Behavior Research Methods*, *50*(1), 362-379. https://doi.org/10.3758/s13428-017-0876-8

J50. *Chuk, T.*, Crookes, K., Hayward, W. G., Chan, A. B., & Hsiao, J. H.* (2017). Hidden Markov model analysis reveals the advantage of analytic eye movement patterns in face recognition across cultures. *Cognition*, *169*, 120-117. https://doi.org/10.1016/j.cognition.2017.08.003

J51. Collova, J. R., Kloth, N., Crookes, K., Burton, N., *Chan, C. Y. H.*, Hsiao, J. H., & Rhodes, G.* (2017). A new other-race effect for gaze perception. *Journal of Experimental Psychology: Human Perception and Performance*, *43*(11), 1857-1863. https://doi.org/10.1037/xhp0000460

J52. *Chuk, T.*, Chan, A. B., & Hsiao, J. H.* (2017). Is having similar eye movement patterns during face learning and recognition beneficial for recognition performance? Evidence from hidden Markov modeling. *Vision Research*, *141*, 204-216. https://doi.org/10.1016/j.visres.2017.03.010

J53. *Chung, H. K. S.**, *Liu, J. Y. W.*, & Hsiao, J. H. (2017). How does reading direction modulate perceptual asymmetry effects? *Quarterly Journal of Experimental Psychology*, *70*(8), 1559-1574. https://doi.org/10.1080/17470218.2016.1193549

J54. Chan, A. B., & Hsiao, J. H.* (2016). Information distribution within musical segments. *Music Perception*, *34*(2), 218-242. https://doi.org/10.1525/mp.2016.34.2.218

J55. Hsiao, J. H.*, & *Galmar, B.* (2016). Holistic processing as measured in the composite task does not always go with right hemisphere processing in face perception. *Neurocomputing*, *182*, 165-177. https://doi.org/10.1016/j.neucom.2015.12.018

J56. *Liu, T.*, Chuk, T., Yeh, S. L., & Hsiao, J. H.* (2016). Transfer of perceptual expertise: The case of simplified and traditional Chinese character recognition. *Cognitive Science*, *40*(8), 1941-1968. https://doi.org/10.1111/cogs.12307

J57. Hsiao, J. H.*, & *Cheung, K.* (2016). Visual similarity of words alone can modulate hemispheric lateralization in visual word recognition: Evidence from modeling Chinese character recognition. *Cognitive Science*, *40*(2), 351-372. https://doi.org/10.1111/cogs.12233

J58. Kanan, C.*, Bseiso, D., Ray, N., Hsiao, J. H., & Cottrell, G. (2015). Humans have idiosyncratic and task-specific scanpaths for judging faces. *Vision Research*, *108*, 67-76. https://doi.org/10.1016/j.visres.2015.01.013

J59. *Tso, R. V. Y.**, Au, T. K., & Hsiao, J. H. (2014). Perceptual expertise: Can sensorimotor experience change holistic processing and left side bias? *Psychological Science*, *25*(9), 1757-1767. https://doi.org/10.1177/0956797614541284

J60. *Chuk, T.*, Chan, A. B.*, & Hsiao, J. H.* (2014). Understanding eye movements in face recognition using hidden Markov models. *Journal of Vision*, *14*(11):8, 1-14. https://doi.org/10.1167/14.11.8

J61. *Lam, S. M.*, & Hsiao, J. H.* (2014). Bilingual experience modulates hemispheric lateralization in visual word processing. *Bilingualism: Language and Cognition*, *17(30)*, 589-609. https://doi.org/10.1017/S1366728913000734

J62. Hsiao, J. H.*, Cipollini, B., & Cottrell, G. (2013). Hemispheric asymmetry in perception: A differential encoding account. *Journal of Cognitive Neuroscience*, *25*(7), 998-1007. https://doi.org/10.1162/jocn_a_00377

J63. Hsiao, J. H.*, & *Lam, S. M.* (2013). The modulation of visual and task characteristics of a writing system on hemispheric lateralization in visual word recognition - A computational exploration. *Cognitive Science*, *37*, 861-890. https://doi.org/10.1111/cogs.12033

J64. Hsiao, J. H.*, & *Cheng, L.* (2013). The modulation of stimulus structure on visual field asymmetry effects: The case of Chinese character recognition. *Quarterly Journal of Experimental Psychology*, *66*(9), 1739-1755. https://doi.org/10.1080/17470218.2013.764902

J65. *Chan, K. W.*, & Hsiao, J. H.* (2013). Hemispheric asymmetry in processing low- and high-pass filtered Cantonese speech in tonal and non-tonal language speakers. *Language & Cognitive Processes*, *28*(8), 1224-1243. https://doi.org/10.1080/01690965.2012.702915

J66. Fernandes, M.*, Wammes, J., & Hsiao, J. H. (2013). Representation of linguistic information determines its susceptibility to memory interference. *Brain Sciences*, *3*(3), 1244-1260. https://doi.org/10.3390/brainsci3031244

J67. Wong, A. C. N.*, Bukach, C. M., Hsiao, J. H., Greenspon, E., Ahern, E., Duan, Y., & Lui, K. F. H. (2012). Holistic processing as a hallmark of perceptual expertise for non-face categories including Chinese characters. *Journal of Vision*, *12*(13):7, 1-5. https://doi.org/10.1167/12.13.7

J68. Hsiao, J. H.*, & *Liu, T. T.* (2012). The optimal viewing position in face recognition. *Journal of Vision*, *12*(2):22, 1-9. https://doi.org/10.1167/12.2.22

J69. Hsiao, J. H.* (2011). Visual field differences can emerge purely from perceptual learning: Evidence from modeling Chinese character pronunciation. *Brain & Language*, *119*(2), 89-98. https://doi.org/10.1016/j.bandl.2011.04.003

J70. Hsiao, J. H.*, & *Liu, T.* (2010). Position of phonetic components may influence how written words are processed in the brain: Evidence from Chinese phonetic compound pronunciation. *Cognitive, Affective, & Behavioral Neuroscience*, *10*(4), 552-559. https://doi.org/10.3758/CABN.10.4.552

J71. Hsiao, J. H.*, & Cottrell, G. W. (2009). Not all expertise is holistic, but it may be leftist: The case of Chinese character recognition. *Psychological Science*, *20*(4), 455-463. https://doi.org/10.1111/j.1467-9280.2009.02315.x

J72. Hsiao, J. H.*, Shieh, D., & Cottrell, G. W. (2008). Convergence of the visual field split: hemispheric modeling of face and object recognition. *Journal of Cognitive Neuroscience, 20*(12), 2298-2307. https://doi.org/10.1162/jocn.2008.20162

J73. Hsiao, J. H.*, & Cottrell, G. W. (2008). Two fixations suffice in face recognition. *Psychological Science, 9*(10), 998-1006. https://doi.org/10.1111/j.1467-9280.2008.02191.x

J74. Barrington, L., Marks, T., Hsiao, J. H., & Cottrell, G. W.* (2008). NIMBLE: A kernel density model of saccade-based visual memory. *Journal of Vision, 8*(14):7, 1-14. https://doi.org/10.1167/8.14.17

J75. Hsiao, J. H.*, Shillcock, R., & Lee, C. (2007). Neural correlates of foveal splitting in reading: evidence from an ERP study of Chinese character recognition. *Neuropsychologia*, *45*, 1280-1292. https://doi.org/10.1016/j.neuropsychologia.2006.10.001

J76. Hsiao, J. H.*, Shillcock, R., & Lavidor, M. (2007). An examination of semantic radical combinability effects with lateralized cues in Chinese character recognition. *Perception and Psychophysics*, *69(3)*, 338-344. https://doi.org/10.3758/BF03193754 [Impact factor: 2.22 (2010; discontinued afterwards)]

J77. Hsiao, J. H.* & Shillcock, R. (2006). Analysis of a Chinese phonetic compound database: Implications for orthographic processing. *Journal of Psycholinguistic Research*, *35,* 405-426. https://doi.org/10.1007/s10936-006-9022-y

J78. Hsiao, J. H.*, Shillcock, R., & Lavidor, M. (2006). A TMS examination of semantic radical combinability effects in Chinese character recognition. *Brain Research*, *1078*, 159-167. https://doi.org/10.1016/j.brainres.2006.01.072

J79. Hsiao, J. H.* & Shillcock, R. (2005). Foveal splitting causes differential processing of Chinese orthography in the male and female brain. *Cognitive Brain Research*, *25*, 531-536. https://doi.org/10.1016/j.cogbrainres.2005.08.005

Preprints:

J80. *Liu, G.*, Zhang, J., Chan, A. B., & Hsiao, J. H.* (2023). Human Attention-Guided Explainable Artificial Intelligence for Computer Vision Models. arXiv preprint arXiv:2305.03601 [cs.CV] (http://arxiv.org/abs/2305.03601)

J81. *Chan, C. Y. H.*, Chan, A. B., Ouyang, G., Tang, A., & Hsiao, J. H. (2023). Neural Correlates of the Advantage of Analytic Eye Movement Patterns in Face Recognition: An ERP Study. PsyArXiv (https://psyarxiv.com/w684x/)

J82. *Qi, R.*, *Zheng, Y.*, Yang, Y., Cao, C. C., & Hsiao, J. H.* (2023). Explanation Strategies for Image Classification in Humans vs. Current Explainable AI. arXiv preprint arXiv:2304.04448 [cs.HC] (https://arxiv.org/abs/2304.04448)

J83. 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. arXiv:2107.14000 [cs.AI] (https://arxiv.org/abs/2107.14000)

J84. Hsiao, J. H.*, *Ngai, H. H. T.*, Qiu, L., Yang, Y., & Cao, C. C. (2021). Roadmap of designing cognitive metrics for explainable Artificial Intelligence (XAI). arXiv:2108.01737 [cs.HC] (https://arxiv.org/abs/2108.01737)

J85. Chan, A. B., & Hsiao, J. H.* (2018). EMHMM Simulation Study. arXiv:1810.07435 [stat.ML] (https://arxiv.org/abs/1810.07435)

International Peer-reviewed Full-Length Papers in Conference Proceedings

C1. Hsiao, J. H., & Chan, A. B. (2023). Towards the next generation explainable AI that promotes AI-human mutual understanding. *NeurIPS XAIA 2023*. https://openreview.net/forum?id=d7FsEtYjvN

C2. *Liu, G.*, Zhang, J., Chan, A. B., & Hsiao, J. H. (2023). Human Attention-Guided Explainable AI for Object Detection. *Proceedings of the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.

C3. *Yang, A.*, *Liu, G.*, *Chen, Y.*, *Qi, R.*, Zhang, J., & Hsiao, J. H. (2023). Humans vs. AI in Detecting Vehicles and Humans in Driving Scenarios. *Proceedings of the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.

C4. *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.

C5. *Liao, W.*, & Hsiao, J. H. (2023). Does enlarging font size facilitate English word and sentence reading in children as beginning readers? *Proceedings of the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.

C6. *Zheng, Y.*, 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.

C7. Yang, Y., *Zheng, Y.*, Deng, D., *Yang, Y.*, Huang, 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*.

C8. *Kwok, J.*, & Hsiao, J. H. (2022). The role of reading strategy in reading comprehension performance: An eye-movement study. *Proceedings of the 44th Annual Conference of the Cognitive Science Society* (pp. 1985-1992). Cognitive Science Society.

C9. *Liao, W.*, *Chong, W. C.*, & Hsiao, J. H. (2022). Does word boundary information facilitate Chinese sentence reading among beginning readers? *Proceedings of the 44th Annual Conference of the Cognitive Science Society* (pp. 2014-2021). Cognitive Science Society.

C10. *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*. Cognitive Science Society.

C11. *Zheng, Y.*, Que, Y., Hu, X., & Hsiao, J. H. (2022). Predicting Reading Performance based on Eye Movement Analysis with Hidden Markov Models. *The 22nd IEEE International Conference on Advanced Learning Technologies* (ICALT 2022). **[Student Award Winner]**

C12. Qiu, L., Yang, Y., Cao, C. C., Liu, J., *Zheng, Y.*, *Ngai, H. H. T.*, Hsiao, J. H., & Chen, L. (2022). Generating Perturbation-based Explanations with Robustness to Out-of-Distribution Data. *ACM Web Conference 2022*. **[Acceptance rate 24%]**

C13. *Liao, W.*, & Hsiao, J. H. (2021). The role of eye movement pattern and global-local information processing abilities in isolated English word reading. *Proceedings of the 43nd Annual Conference of the Cognitive Science Society* (pp. 2253-2259). Cognitive Science Society.

C14. Hsiao, J. H., *An, J.*, & Chan, A. B. (2020). The role of eye movement consistency in learning to recognise faces: Computational and experimental examinations. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society* (pp. 1072-1078). Cognitive Science Society.

C15. *Zheng, Y.*, & Hsiao, J. H. (2020). Audiovisual Information Processing in Emotion Recognition: An Eye Tracking Study. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society* (pp. 2624-2630). Cognitive Science Society.

C16. 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*.

C17. Liu, Z., Yu, L., Hsiao, J. H., & Chan, A. B. (2019). Parametric Manifold Learning of Gaussian Mixture Models. *Proceeding of the 28th International Joint Conference on Artificial Intelligence (IJCAI)* (pp. 3073-3079).

C18. Hsiao, J. H., & Chan, A. B. (2019). EMHMM: Eye Movement Analysis with Hidden Markov Models and Its Applications in Cognitive Research. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 17-18). Montreal, QB: Cognitive Science Society.

C19. *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* (pp. 1283-1289). Montreal, QB: Cognitive Science Society. **[Student travel award winner]**

C20. *Tso, R. V. Y.*, Chan, R. T. C., & Hsiao, J. H. (2019). When is a visual perceptual deficit more holistic but less right-lateralized? The case of high-school students with dyslexia in Chinese. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 2995-3000). Montreal, QB: Cognitive Science Society.

C21. *Cheng, Z.*, Hayward, W. G., Chan, A. B., & Hsiao, J. H. (2018). Optimal face recognition performance involves a balance between global and local information processing: Evidence from cultural difference. In T.T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceeding of the 40th Annual Conference of the Cognitive Science Society* (pp. 1476-1481). *Austin, TX: Cognitive Science Society.*

C22. *Li, T. K.*, *Chan, H. Y. V.*, *Li. L.*, & Hsiao, J. H. (2017). How does music reading expertise modulate visual processing of English words? An ERP study. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. J. Davelaar (Eds.), *Proceeding of the 39th Annual Conference of the Cognitive Science Society* (pp. 2561-2566). Austin, TX: Cognitive Science Society.

C23. *Tso, R. V. Y.*, Chen, H., Yeung, Y. A., Au, T. K. F., & Hsiao, J. H. (2017). Right hemisphere lateralization a holistic processing do not always go together: An ERP investigation of a training study. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. J. Davelaar (Eds.), *Proceeding of the 39th Annual Conference of the Cognitive Science Society* (pp.3368-3373). Austin, TX: Cognitive Science Society.

C24. *Zhang, J.*, Chan, A. B., Lau, E. Y. Y., & Hsiao, J. H. (2017). Insomniacs misidentify angry faces as fearful faces because of missing the eyes: An eye-tracking study. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. J. Davelaar (Eds.), the *Proceeding of the 39th Annual Conference of the Cognitive Science Society* (pp. 1430-1435). Austin, TX: Cognitive Science Society.

C25. *Chan, C. Y. H.*, Wong, J. J., Chan, A. B., Lee, T. M. C., & Hsiao, J. H. (2016). Analytic eye movement patterns in face recognition are associated with better performance and more top-down control of visual attention: an fMRI study. In Papafragou, A., Grodner, D., Mirman, D., & Trueswell, J.C. (Eds.), *Proceeding of the 38th Annual Conference of the Cognitive Science Society* (pp. 854-859). Austin, TX: Cognitive Science Society.

C26. *Chuk, T.*, Chan, A. B., Shimojo, S., & Hsiao, J. H. (2016). Mind reading: Discovering individual preferences from eye movements using switch hidden Markov models. In

Papafragou, A., Grodner, D., Mirman, D., & Trueswell, J.C. (Eds.), *Proceeding of the 38th Annual Conference of the Cognitive Science Society* (pp. 182-187). Austin, TX: Cognitive Science Society.

C27. *Brueggemann, S.*, Chan, A. B., & Hsiao, J. H. (2016). Hidden Markov modeling of eye movements with image information leads to better discovery of regions of interest. In Papafragou, A., Grodner, D., Mirman, D., & Trueswell, J.C. (Eds.), *Proceeding of the 38th Annual Conference of the Cognitive Science Society* (pp. 1032-1037). Austin, TX: Cognitive Science Society.

C28. *Li, T. K.*, Chung, S. T. L., & Hsiao, J. H. (2016). Music reading expertise modulates visual spans in both music note and English letter reading. In Papafragou, A., Grodner, D., Mirman, D., & Trueswell, J.C. (Eds.), *Proceeding of the 38th Annual Conference of the Cognitive Science Society* (pp. 1499-1504). Austin, TX: Cognitive Science Society.

C29. *Chan, C. Y. H.*, Chan, A. B., Lee, T. M. C., & Hsiao, J. H. (2015). Eye movement pattern in face recognition is associated with cognitive decline in the elderly. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceeding of the 37th Annual Conference of the Cognitive Science Society* (pp. 321-326). Austin, TX: Cognitive Science Society.

C30. *Cheung, T. K.*, & Hsiao, J. H. (2015). Complex mental addition and multiplication rely more on visuospatial than verbal processing. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceeding of the 37th Annual Conference of the Cognitive Science Society* (pp. 363-368). Austin, TX: Cognitive Science Society.

C31. *Chuk, T.*, Chan, A. B., & Hsiao, J. H. (2015). Hidden Markov model analysis reveals better eye movement strategies in face recognition. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceeding of the 37th Annual Conference of the Cognitive Science Society* (pp. 393-398). Austin, TX: Cognitive Science Society.

C32. *Chung, H. K. S.*, *Leung, J. C. Y.*, & Hsiao, J. H. (2015). Hemispheric differences in holistic processing: Experts' and novices' processing of Chinese characters. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceeding of the 37th Annual Conference of the Cognitive Science Society* (pp. 399-404). Austin, TX: Cognitive Science Society.

C33. *Li, T. K.*, & Hsiao, J. H., (2015). Music reading expertise modulates hemispheric lateralization in English word processing but not in Chinese character processing. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceeding of the 37th Annual Conference of the Cognitive*

Science Society (pp. 1344-1349). Austin, TX: Cognitive Science Society. **[Student travel award winner]**

C34. *Liu, T.*, & Hsiao, J. H. (2015). Can experience with different types of writing system modulate holistic processing in speech perception? In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceeding of the 37th Annual Conference of the Cognitive Science Society* (pp. 1398-1403). Austin, TX: Cognitive Science Society.

C35. *Tso, R. V. Y.*, Au, T. K., & Hsiao, J. H. (2015). How do different training tasks modulate our perception and hemispheric lateralization in the development of perceptual expertise? In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceeding of the 37th Annual Conference of the Cognitive Science Society* (pp. 1991-1996). Austin, TX: Cognitive Science Society.

C36. *Liu, T.*, & Hsiao, J. H. (2014). Holistic processing in speech perception: Experts' and novices' processing of isolated Cantonese syllables. In P. Bello, M. Guarini, M. McShane, & B. Scassellati, (Eds.) *Proceeding of the 36th Annual Conference of the Cognitive Science Society* (pp. 869-874). Austin, TX: Cognitive Science Society.

C37. Kanan, C., Bseiso, D. N. F., Ray, N. A., Hsiao, J. H., & Cottrell, G. W. (2014). Predicting an observer's task using multi-fixation pattern analysis. *Proceedings of the Symposium on Eye tracking Research and Applications* (pp. 287-290).

C38. Eckhardt, A., Maier, C., Hsieh, J. J., *Chuk, T.*, Chan, A., Hsiao, J. H., & Buettner, R. (2013). Objective measures of IS usage behavior under conditions of experience and pressure using eye fixation data. *Proceedings for the International Conference on Information Systems*, Milan, Italy.

C39. *Galmar, B.*, & Hsiao, J. H. (2013). Holistic processing is not always a property of right hemisphere processing- Evidence from computational modeling of face recognition. *Neural Information Processing: Lecture Notes in Computer Science*, *8226*, 1-8.

C40. *Chen, J.*, & Hsiao, J. H. (2013). Hemispheric asymmetry in nonconscious processing. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 2022-2027). Austin, TX: Cognitive Science Society.

C41. *Chuk, T.*, Ng, A., Coviello, E., Chan, A. B., & Hsiao, J. H. (2013). Understanding eye movements in face recognition with hidden Markov model. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 328-333). Austin, TX: Cognitive Science Society. **[Student travel award winner]**

C42. *Galmar, B.*, & Hsiao, J. H. (2013). Computational exploration of task and attention modulation on holistic processing and left side bias effects in face recognition: the case of face drawing experts. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 2356-2361). Austin, TX: Cognitive Science Society.

C43. *Tso, R. V. Y.*, Au, T. K., & Hsiao, J. H. (2013). Expert marker of Chinese character recognition: Left-side bias versus holistic processing? In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 1492-1497). Austin, TX: Cognitive Science Society.

C44. *Liu, T.*, & Hsiao, J. H. (2012). The perception of simplified and traditional Chinese characters in the eye of simplified and traditional Chinese readers. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 689-694). Austin, TX: Cognitive Science Society.

C45. *Tso, R. V. Y.*, Au, T. K., & Hsiao, J. H. (2012). Writing facilitates learning to read in Chinese through reduction of holistic processing: A developmental study. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 2463-2468). Austin, TX: Cognitive Science Society.

C46. Cipollini, B., Hsiao, J. H., & Cottrell, G. (2012). Connectivity asymmetry can explain visual hemispheric asymmetries in local/global, face, and spatial frequency processing. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 1410-1415). Austin, TX: Cognitive Science Society.

C47. *Wong, Y. K.*, & Hsiao, J. H. (2012). Reading direction is sufficient to account for the optimal viewing position in reading: The case of music reading. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 2540-2545). Austin, TX: Cognitive Science Society.

C48. Hsiao, J. H., & *Cheung, K. C. F.* (2011). Computational exploration of the relationship between holistic processing and right hemisphere lateralization in featural and configural recognition tasks. In L. Carlson, C. Hoelscher, & T.F. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp.2592-2597). Austin, TX: Cognitive Science Society.

C49. Hsiao, J. H., & *Cheung, K.* (2011). The modulation of word type frequency on hemispheric lateralization in visual word recognition: Evidence from modeling Chinese character recognition. In L. Carlson, C. Hoelscher, & T.F. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 891-896). Austin, TX: Cognitive Science Society.

C50. *Lam, S. M.*, & Hsiao, J. H. (2011). Bilinguals have different hemispheric lateralization in visual word processing from monolinguals. In L. Carlson, C. Hoelscher, & T.F. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp.3409-3414). Austin, TX: Cognitive Science Society.

C51. *Tso, R. V. Y.*, Au, T. K., & Hsiao, J. H. (2011). The influence of writing experiences on holistic processing in Chinese character recognition. In L. Carlson, C. Hoelscher, & T.F. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 1442-1447). Austin, TX: Cognitive Science Society.

C52. *Cheung, K. C. F.*, & Hsiao, J. H. (2010). Visual and task characteristics may explain hemispheric asymmetry in visual word recognition. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 1441-1446). Austin, TX: Cognitive Science Society.

C53. Hsiao, J. H., & Cottrell, G. W. (2009). What is the cause of left hemisphere lateralization of English visual word recognition? Pre-existing language lateralization, or task characteristics? In N. Taatgen & H. van Rijn (Eds.) *Proceedings of the 31st Annual Conference of the Cognitive Science Society* (pp. 881-886). Austin, TX: Cognitive Science Society.

C54. Hsiao, J. H., Shahbazi, R., & Cottrell, G. W. (2008). Hemispheric asymmetry in visual perception arises from differential encoding beyond the sensory level. In B. C. Love, K. McRae, & V. M. Sloutsky (Eds.), *Proceedings of the 30th Annual Conference of the Cognitive Science Society* (pp. 857-862). Austin, TX: Cognitive Science Society.

C55. Hsiao, J. H., Shieh, D., & Cottrell, G. W. (2007). Computational explorations of split architecture in modeling face and object recognition. In D. S. McNamara & J. G. Trafton (Eds.), *Proceedings of the 29th Annual Conference of the Cognitive Science Society* (pp. 365-370). Austin, TX: Cognitive Science Society.

C56. Hsiao, J. H. & Shillcock, R. (2006). Hemispheric differences emerge from perceptual learning: Evidence from modeling Chinese character pronunciation. In R. Sun (Ed.), *Proceedings of the 28th Annual Conference of the Cognitive Science Society* (pp. 345-350). Mahwah, NJ: Lawrence Erlbaum Associates. **[BEST LANGUAGE MODELING PAPER PRIZE WINNER]**.

C57. Hsiao, J. H. & Shillcock, R. (2005). Differences of split and non-split architectures emerged from modeling Chinese character pronunciation. In B. G. Bara, L. Barsalou, & M. Bucciarelli (Eds.), *Proceedings of the Twenty Seventh Annual Conference of the Cognitive Science Society* (pp. 989-994). Mahwah, NJ: Lawrence Erlbaum Associates.

C58. Hsiao, J. H. & Shillcock, R. (2004). Connectionist modeling of Chinese character pronunciation based on foveal splitting. In K. Forbus, D. Gentner, & T. Regier (Eds.), *Proceedings of the 26th Annual Conference of the Cognitive Science Society* (pp. 601-606). Mahwah, NJ: Lawrence Erlbaum Associates.

C59. Hsiao, J. H. (2003). A split model to deal with semantic anomalies in the task of word prediction. In R. Alterman, & D. Kirsh (Eds.), *Proceedings of the 25th Annual Conference of the Cognitive Science Society* (pp. 581-586). Mahwah, NJ: Lawrence Erlbaum Associates.

Keynote/Plenary/Other Invited Lectures in International/Regional Conferences and Events

- International presentations are in bold.

Keynote Lectures:

1. Hsiao, J. H. (2019). EMHMM: Eye Movement analysis with Hidden Markov Models (EMHMM) and its applications in tourism experimental research. Invited Keynote Speech at *the Tourism Experimental Research Conference*, Jinan, China (Sept. 28, 2019)
2. **Hsiao, J. H. (2012). A differential encoding account of hemispheric asymmetry in perception. Invited Keynote Speech at *the 2012 Young Computational Neuroscientist Workshop*, Daejeon Convention Center, Daejeon, South Korea.**

Plenary Lectures:

3. Hsiao, J. H. (2023). Explanation strategies for image classification in humans vs. current explainable AI. Invited talk at the *Themes in Explainable AI (XAI) Workshop*, HKU.
4. Hsiao, J. H. (2021). Eye Movement analysis with Hidden Markov Models (EMHMM) and its applications in cognitive research. Plenary lecture at the *NSFC-RGC Young Scholar Forum: Neural Basis of Decision Making and Social Behavior*.
5. Hsiao, J. H. (2017). How does music reading expertise modulate visual processing of English words? Invited plenary talk at *the EEG and NeuriScan CURRY Training Workshop*, the Hong Kong Polytechnic University
6. Hsiao, J. H. (2015). Perceptual expertise: Attention and information processing mechanisms. Invited plenary talk at *the Spring Symposium of the HKU Science of Learning Strategic Theme*.
7. **Hsiao, J. H. (2012). Asymmetries in the recognition of visual stimuli as a result of expertise. Invited plenary talk at *the 3rd North Sea Meeting on Brain Asymmetries*, Ghent, Belgium.**
8. Hsiao, J. H. (2010). Left side bias in visual perception may reflect the development of expertise at the categorical level. Invited plenary talk at *the HKU-International Workshop on Visual Cognition*.

Other Invited Lectures:

9. Hsiao, J. H. (2023). Understanding human cognition through machine learning methods and its implications for explainable artificial intelligence. *Invited department seminar talk at the Department of Computer Science, Hong Kong University of Science & Technology*.
10. Hsiao, J. H. (2022). Understanding individual differences in reading processes through Eye Movement Analysis with Hidden Markov Models (EMHMM). *Invited department seminar talk at the Department of Linguistics and Modern Languages, Chinese University of Hong Kong*.
11. Hsiao, J. H. (2022). Deep Neural Net + Hidden Markov Model: A novel framework for understanding human learning. Invited talk at the *CogSci 2022 Hong Kong Meetup & Symposium*.
12. Hsiao, J. H. (2021). Does music reading experience modulate eye movement pattern in reading differentially across languages in bilinguals? Invited seminar talk at *the Research Centre for Language, Cognition, and Neuroscience (RCLCN), Hong Kong Polytechnic University*.
13. **Hsiao, J. H. (2020). Understanding individual differences in face recognition through Eye Movement analysis with Hidden Markov Models (EMHMM). Invited Symposium Talk at *the Experimental Psychology Society (EPS) Beijing Meeting* (April 3-5, 2020; cancelled due to COVID-19).**
14. Hsiao, J. H. (2019). EMHMM: Eye movement analysis with hidden Markov models and its applications in cognitive research. Invited Seminar Talk at *the Department of Psychology, National Taiwan University*. (Aug. 12, 2019)
15. Hsiao, J. H., & Chan, A. B. (2019). Mini-course in eye movement analysis with hidden Markov models. Invited Summer Lectures, *Department of Economics, National Taiwan University*. (Aug. 12-16, 2019)
16. Hsiao, J. H. (2019). Eye Movement analysis with Hidden Markov Models (EMHMM) and its applications in clinical research. Invited Seminar Talk at *the Graduate Institute of Biomedical Sciences, China Medical University, Taiwan*. (Aug. 9, 2019)
17. **Chan, A. B., & Hsiao, J. H. (2019). Simplifying mixture models with the hierarchical EM algorithm, and its application to eye movement analysis in psychological research. Invited Seminar Talk at *the Redwood Center for Theoretical Neuroscience, University of California at Berkeley* (Jul. 10, 2019)**
18. Chan, A. B., & Hsiao, J. H. (2018). Simplifying mixture models with the hierarchical EM Algorithm, and its application to analyzing eye movement patterns in face recognition. Invited Seminar Talk at *the Center for Research on Intelligent Perception and Computing, Institute of Automaton, Chinese Academy of Science, Beijing* (Sept. 21, 2018)

19. Hsiao, J. H. (2018). Understanding the associations between eye movement patterns, task performance, and cognitive abilities through Eye Movement analysis with Hidden Markov Models (EMHMM). Invited *Neuroscience for Education Seminar talk, Faculty of Education, HKU* (June 2018).
20. **Chan, A. B., & Hsiao, J. H. (2018). Simplifying mixture models with the hierarchical EM algorithm, and its application to analyzing eye-movement patterns of older adults. Invited department seminar talk at *the Department of Computer Science, National University of Singapore* (Feb., 2018).**
21. **Hsiao, J. H., *Chung, H. K. S.*, *Galmar, B.*, *Leung, J. C. Y.*, & *Wong, V. M. Y.* (2018). On the relationship between holistic processing and right hemisphere processing. Invited presentation at *the CCD International Workshop on Person Perception by the ARC Center of Excellence in Cognition and its Disorders*, Perth, Australia. (March, 2018)**
22. Hsiao, J. H. (2017). How does music reading expertise modulate visual processing of English words? Invited talk at *EEG & Neuroscan CURRY Training Workshop*, Oct. 16-18, 2017.
23. Hsiao, J. H. (2017). How does music reading expertise modulate English word processing? Invited department seminar talks at *the Department of Linguistics, University of Hong Kong*, and at *the Department of Chinese and Bilingual Studies, Hong Kong Polytechnic University*.
24. Hsiao, J. H. (2017). Understanding eye movement patterns in face recognition using hidden Markov models. Invited department seminar talk at *the Department of Psychology, National Taiwan University*. (Feb. 26, 2017)
25. Hsiao, J. H., *Chan, C. Y. H.*, Chan, A. B., & Lee, T. M. C. (2015). Eye movement pattern in face recognition is associated with cognitive decline in the elderly. Invited talk at *the HKU International Alzheimer's Disease Conference*.
26. **Hsiao, J. H., *Chan, C. Y. H.*, Chan, A. B., & Lee, T. M. C. (2015). Eye movement pattern in face recognition is associated with cognitive decline in the elderly. Invited talk at *the Department of Information Systems and Information Economics, Goethe University Frankfurt*. (April 8, 2015)**
27. Hsiao, J. H., Chan, A. B., & *Chuk, T.* (2014). Understanding eye movements in face recognition with hidden Markov model. Invited talk presented at *the 6th Chinese International Conference on Eye Movements (CICEM)*, Beijing, China. (presented by *Chuk, T.*)
28. **Hsiao, J. H. (2013) Reduced holistic processing in the development of Chinese orthographic representations. Invited symposium talk at *the Annual Meeting of the Society for the Scientific Study of Reading*.**

29. **Hsiao, J. H. (2013). Reduced holistic processing in expert Chinese character recognition. Invited symposium talk at *the Asia Pacific Conference on Vision 2013*, Suzhou, China.**
30. Hsiao, J. H. (2013). Eye movements in face recognition. Invited talk at *the Noah's Ark Lab, Huawei Technologies Co.*, Ltd., Hong Kong.
31. Hsiao, J. H. (2013). Perceptual expertise in Chinese character recognition. Invited seminar talk at *the Department of Linguistics and Modern Languages, Chinese University of Hong Kong*.
32. **Hsiao, J. H. (2012). Reduced holistic processing in Chinese character recognition expertise. Invited department seminar talk, *Faculty of Psychology and Education, the Universite libre de Bruxelles*.**
33. Hsiao, J. H. (2012). Computational modeling of hemispheric lateralization in face and visual word recognition. Invited seminar talk at *the Department of Computer Science & Information Engineering, National Taiwan University*.
34. Hsiao, J. H. (2012). Reduced holistic processing in Chinese character recognition expertise. Invited seminar talk at *the Department of Psychology, National Taiwan University*.
35. Hsiao, J. H. (2010). Not all visual expertise is holistic, but it may be leftist: From face recognition to visual word recognition. Invited seminar talk at *the Department of Psychology, Chinese University of Hong Kong*.

Peer-Reviewed Conference Presentations

Oral Presentations

1. *Hui, I. T. K.*, Sit, H. F., Cheung, F. T. W., Hsiao, J. H., & Li, S. X. (2023). Mediating Effect of Pre-Sleep Arousals on the Association between Sleep-related Attentional Bias and Sleep Disturbances – An Eye-tracking Study.
2. *Liu, G.*, Zhang, J., Chan, A. B., & Hsiao, J. H. (2023). Human Attention-Guided Explainable Artificial Intelligence for Computer Vision Models. Oral presentation at The *International Conference of Human Performance Modelling and Augmentation* 2023 (HPMA 2023) – The 2nd *Human Factors Engineering and Hybrid Intelligence Conference*.
3. *Zhong, N.*, Hsiao, J. H., & Hayward, W. (2023). Idiosyncratic eye-movement patterns affect behavioral and ERP correlates of face perception. Talk presented at the European Conference on Visual Perception (ECVP, 27-31 Aug. 2023, Pathos).
4. *Liu, G.*, Meng, Q., Hsiao, J. H., & Tian, L. (2023). EEG-based pitch perception analysis using EEG net. Talk presented at the *China Biomedical Engineering Conference & Medical Innovation Summit* (BME 2023).

5. Yang, Y., *Zheng, Y.*, Deng, D., *Yang, Y*., Huang, Y., Hsiao, J. H., & Cao, C. (2022). HSI: Human Saliency Imitator for Benchmarking Saliency-based Model Explanations. Talk presented at *the Tenth AAAI Conference on Human Computation and Crowdsourcing*.
6. *Zheng, Y.*, Chen, D., Hu, X., & Hsiao, J. H. (2022). The impact of mask use on social categorization. Talk presented at *the 44th Annual Conference of the Cognitive Science Society*. **[Acceptance rate 27%]**
7. Qiu, L., Yang, Y., Cao, C. C., Liu, J., *Zheng, Y.*, *Ngai, H. H. T.*, Hsiao, J. H., & Chen, L. (2022). Generating Perturbation-based Explanations with Robustness to Out-of-Distribution Data. *ACM Web Conference 2022*. **[Acceptance rate 24%]**
8. Hsiao, J. H., *An, J.*, & Chan, A. B. (2020). The role of eye movement consistency in learning to recognise faces: Computational and experimental examinations. Talk presented at *the 42nd Annual Conference of the Cognitive Science Society*. **[Acceptance rate 20.9%]**
9. Que, Y., *Zheng, Y.*, Hsiao, J. H., & Hu, X. (2020). Exploring the Effect of Personalized Background Music on Reading Comprehension. Talk presented at the *Jointed Conference on Digital Libraries (JCDL) 2020*. [Acceptance rate 31.1%]
10. Hsiao, J. H., & Chan, A. B. (2019). EMHMM: eye movement analysis with hidden Markov models and its applications in cognitive research. Tutorial Talk Presentation at *the 41th Annual Conference of the Cognitive Science Society*, Montreal, Canada.
11. *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. Talk presented at *the 41th Annual Conference of the Cognitive Science Society*, Montreal, Canada. **[Student Travel Award Winner]**
12. Liu, Z., Yu, L., Hsiao, J. H., & Chan, A. B. (2019). Parametric Manifold Learning of Gaussian Mixture Models. Talk presented at *the 28th International Joint Conference on Artificial Intelligence* (IJCAI). **[Acceptance rate 13.7%]**
13. *Li, T. K.*, *Chung, B. H. J*, *Yip, J. C. N.*, Chan, A. B., & Hsiao, J. H. (2018). Music reading expertise facilitates English but not Chinese sentence reading: Evidence from eye movement behavior. Talk presented at *the 15th International Conference on Music Perception and Cognition/10th triennial conference of the European Society for the Cognitive Science of Music*, Sydney, Australia.
14. Hsiao, J. H. (2017). Understanding eye movement patterns in face recognition using hidden Markov models. Symposium talk at *the Asia Pacific Conference on Vision*, Tainan, Taiwan.
15. *Zhang, J.*, Chan, A. B., Lau, E. Y. Y., & Hsiao, J. H. (2017). Insomniacs misidentify angry faces as fearful faces because of missing the eyes: An eye-tracking study. Talk

presented at *the 39th Annual Conference of the Cognitive Science Society*, London, the UK.

16. *Li, T. K.*, & Hsiao, J. H., (2015). Music reading expertise modulates hemispheric lateralization in English word processing but not in Chinese character processing. Talk presented at *the 37th Annual Conference of the Cognitive Science Society*, Pasadena, USA. **[Student Travel Award Winner]**
17. *Tso, R. V.*, Au, T. K., & Hsiao, J. H. (2014). Holistic processing in visual expertise acquisition: An Inverted U-shape Function in the Development of Chinese Character Recognition. Talk presented at *the 10th Asia-Pacific Conference on Vision* (APCV 2014), Takamatsu, Japan, 19 – 22 July, 2014. **[Student Travel Award Winner]**
18. *Liu, T.*, & Hsiao, J. H. (2014). Holistic processing in speech perception: Experts' and novices' processing of isolated Cantonese syllables. Talk presented at *the 36th Annual Meeting of the Cognitive Science Society*, Quebec City, Canada.
19. Kanan, C., Bseiso, D. N. F., Ray, N. A., Hsiao, J. H., & Cottrell, G. W. (2014). Predicting an Observer's Task using Multi-Fixation Pattern Analysis. Talk presented at *the Symposium on Eye tracking Research and Applications*, Safety Harbor, FL, USA.
20. Eckhardt, A., Maier, C., Hsieh, J. J., *Chuk, T.*, Chan, A., Hsiao, J. H., & Buettner, R. (2013). Objective measures of IS usage behavior under conditions of experience and pressure using eye fixation data. Talk presented at *the International Conference on Information Systems*, Milan, Italy.
21. *Galmar, B.*, & Hsiao, J. H. (2013). Holistic processing is not always a property of right hemisphere processing- Evidence from computational modeling of face recognition. Talk presented at *the 20th International Conference on Neural Information Processing*, Daegu, Korea.
22. *Chuk, T.*, Ng, A., Coviello, E., Chan, A. B., & Hsiao, J. H. (2013). Understanding eye movements in face recognition with hidden Markov model. Talk presented at *the 35th Annual Conference of the Cognitive Science Society*, Berlin, Germany. **[Student Travel Award Winner]**
23. *Tso, R. V. Y.*, Au, T. K., & Hsiao, J. H. (2013). Expert marker of Chinese character recognition: Left-side bias versus holistic processing? Talk presented at *the 35th Annual Conference of the Cognitive Science Society*, Berlin, Germany.
24. Hsiao, J. H., *Tso, R. V. Y.*, & Au, T. K. (2013). Reduced holistic processing in the development of Chinese orthographic representations. Talk presented at *the Twentieth Annual Meeting Society for the Scientific Study of Reading*.
25. *Chen, J.*, & Hsiao, J. H. (2013). When subliminal stimuli fail to transfer across hemispheres: interhemispheric integration of nonconscious information. PsyCh Journal, 2(Suppl. 1), 49. Talk presented at *the Asia Pacific Conference on Vision* 2013, Suzhou, China. **[Student travel award winner]**

26. *Liu, T.*, Yeh, S. & Hsiao, J. H. (2013). The transfer of left side bias in the perception of simplified and traditional Chinese. PsyCh Journal, 2(Suppl. 1), 55. Talk presented at the *Asia Pacific Conference on Vision*, Suzhou, China. **[Student travel award winner]**
27. *Liu, T.*, & Hsiao, J. H. (2012). The perception of simplified and traditional Chinese characters in the eye of simplified and traditional Chinese readers. Talk presented at *the 34th Annual Conference of the Cognitive Science Society*, Sapporo, Japan.
28. Hsiao, J. H., & *Cheung, K. C. F.* (2011). Computational exploration of the relationship between holistic processing and right hemisphere lateralization in featural and configural recognition tasks. Talk presented at *the 33rd Annual Conference of the Cognitive Science Society*, Boston, USA.
29. *Tso, R. V. Y.*, Au, T. K., & Hsiao, J. H. (2011). The influence of writing experiences on holistic processing in Chinese character recognition. Talk presented at *the 33rd Annual Conference of the Cognitive Science Society*, Boston, USA, and Asia-Pacific Conference on Vision, Hong Kong (Abstract published in i-Perception, 2(4), 345).
30. Hsiao, J. H., & *Cheung, K.* (2011). Word type frequency alone can modulate hemispheric asymmetry in visual word recognition: Evidence from modeling Chinese character recognition. Talk presented at *Asia-Pacific Conference on Vision*, Hong Kong (Abstract published in i-Perception, 2(4), 343).
31. *Lam, S.-M.*, & Hsiao, J. H. (2011). Bilinguals have different hemispheric lateralization in visual word processing from monolinguals. Talk presented at *Asia-Pacific Conference on Vision*, Hong Kong (Abstract published in i-Perception, 2(4), 344).
32. *Wong, Y. K.*, *Lau, J. P. C.*, Gauthier, I., & Hsiao, J. H. (2011). Music reading expertise selectively improves categorical judgment with musical notation. Talk presented at *Asia-Pacific Conference on Vision*, Hong Kong. (Abstract published in i-Perception, 2(4), 347)
33. *Cheung, K. C. F.*, & Hsiao, J. H. (2010). Visual and task characteristics may explain hemispheric asymmetry in visual word recognition. Talk presented at *the 32nd Annual Conference of the Cognitive Science Society*, Portland, USA
34. Hsiao, J. H., Shahbazi, R., & Cottrell, G. W. (2008). Hemispheric asymmetry in visual perception arises from differential encoding beyond the sensory level. Talk presented at *the 30th Annual Conference of the Cognitive Science Society*, Washington, D.C., USA.
35. Hsiao, J. H. & Cottrell, G. W. (2008). Perception of Chinese characters in novices' and experts' eyes: Similarities and differences between face and Chinese character recognition. Talk presented at *the Annual Meeting of the Vision Sciences Society*, Naples, USA.

36. Hsiao, J. H., Tanaka, J., & Cottrell, G. W. (2008). How does expertise influence our performance and eye movements in face and object recognition? Talk presented at *the Inter-Science of Learning Center conference*, Pittsburgh, USA.
37. Hsiao, J. H., Shahbazi, R., & Cottrell, G. W. (2007). A differential encoding account of hemispheric asymmetry in visual perception. Talk presented at *the 3rd Annual Computational Cognitive Neuroscience Conference*, San Diego, USA.
38. Hsiao, J. H., Shieh, D., & Cottrell, G. W. (2007). Computational explorations of split architecture in modeling face and object recognition. Talk presented at *the 29th Annual Conference of the Cognitive Science Society*, Nashville, USA.
39. Hsiao, J. H. & Shillcock, R. (2006). Hemispheric differences emerge from perceptual learning: Evidence from modeling Chinese character pronunciation. Talk presented at *the 28th Annual Conference of the Cognitive Science Society*, Vancouver, Canada.
40. Hsiao, J. H. & Shillcock, R. (2005). Differences of split and non-split architectures emerged from modeling Chinese character pronunciation. Talk presented at *the Twenty Seventh Annual Conference of the Cognitive Science Society*, Stresa, Italy.
41. Hsiao, J. H. & Shillcock, R. (2004). Connectionist modeling of Chinese character pronunciation based on foveal splitting. Talk presented at *the 26th Annual Conference of the Cognitive Science Society*, Chicago, USA.
42. Hsiao, J. H. (2003). A split model to deal with semantic anomalies in the task of word prediction. Talk presented at *the 25th Annual Conference of the Cognitive Science Society*, Boston, USA.
43. Hsiao, J. H. (2002). An explanation of semantic anomalies from semantic predictions in a Hebbian-competitive network. Talk presented at *the Northwest Linguistics Conference*, Vancouver, Canada.

Poster Presentations

44. Yong, L., Chan, A., Hsiao, J., Choy, J. C. P., Ma, M., and Wong, G. H. Y. (2023). Use of online therapy session data to develop behavioural markers for cognitive outcomes in non-pharmacological intervention. *Alzheimer's Association International Conference (AAIC)*. Amsterdam, Netherlands; 16-20 July 2023.
45. *Hui, I. T. K.*, *Yang, X.*, Hsiao, J. H., & Li, S. X. (2023). Effect of Sleep Deprivation on Facial Emotion Recognition – An Experimental Eye -tracking Study. *World Sleep* 2023.
46. *Zhong, N.*, Hsiao, J. H., & Hayward, W. G. (2023). Idiosyncratic eye-movement patterns affect behavioural and ERP correlates of face perception. *ECVP 2023*.
47. *Liu, G.*, Zhang, J., Chan, A., & Hsiao, J. H. (2023). Human Attention-Guided Explainable AI for Object Detection. Poster presentation at *the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society

48. *Yang, A.*, *Liu, G.*, *Chen, Y.*, *Qi, R.*, Zhang, J., & Hsiao, J. H. (2023). Humans vs. AI in Detecting Vehicles and Humans in Driving Scenarios. Poster presentation at *the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.
49. *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. Poster presentation at *the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.
50. *Liao, W.*, & Hsiao, J. H. (2023). Does enlarging font size facilitate English word and sentence reading in children as beginning readers? Poster presentation at *the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.
51. *Zheng, Y.*, 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. Poster presentation at *the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.
52. Lo., Y. Y., *Teng, X.*, *Liao, W.*, & Hsiao, J. H. (2023). Bilingual students' test-taking strategies in content subject assessments. Poster presentation at *the 45th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.
53. *Kwok, J.*, & Hsiao, J. H. (2022). The role of reading strategy in reading comprehension performance: An eye-movement study. Poster presentation at *the 44th Annual Conference of the Cognitive Science Society*.
54. *Liao, W.*, *Chong, W. C.*, & Hsiao, J. H. (2022). Does word boundary information facilitate Chinese sentence reading among beginning readers? Poster presentation at *the 44th Annual Conference of the Cognitive Science Society*.
55. Griffin, J., Hsiao, J. H., & Scherf, S. (2022). Evaluating the ability of serious game intervention to alter visual processing strategies in autism during eye gaze processing using computational modeling. Poster presentation at the *Vision Sciences Society (VSS) Annual Meeting* in St. Pete Beach, Florida.
56. *Ngai, H. H. T.*, Hsiao, J. H., Mohanty, A., & Jin, F. J. (2021). Elucidating the computational processes of perceptual decision-making of emotion ensembles. Poster presented at *the Society for Affective Science Virtual Meeting*.
57. Tso, R. V. Y., Chui, C. O. H., & Hsiao, J. H. (2021). How does face mask in COVID-19 pandemic disrupt face learning and recognition in adults with Autism Spectrum Disorder? Poster presented at *the 42nd Annual Conference of the Cognitive Science Society*.
58. *Liao, W.*, & Hsiao, J. H. (2021). The role of eye movement pattern and global-local information processing abilities in isolated English word reading. Poster presented at *the 42nd Annual Conference of the Cognitive Science Society*. Cognitive Science Society.

59. Hsiao, J. H., Chan, S. K. W, Chan, A. B., *Zheng, Y.*, *Lau, K. M.*, & *Tsang, M. H.* L. (2021). Eye movement consistency in global-local perceptual processing predicts schizotypy. Poster presented at *the 42nd Annual Conference of the Cognitive Science Society*.
60. *Ngai, H. H. T.*, Hsiao, J. H., Mohanty, A., & Jin, F. J. (2021). Emotion-related perceptual decision making using hidden Markov model-based eye-movement analysis. Poster presented at *the Society for Affective Science Virtual Meeting*.
61. *Liao, W.*, *Li, S. K.*, *Wu, Y.*, & Hsiao, J. H. (2020). Differential modulation effects of music expertise on English and Chinese sentence reading. Poster presented at *the 42nd Annual Conference of the Cognitive Science Society*. Abstract published in *Proceedings of the 42nd Annual Conference of the Cognitive Science Society* (pp. 2774). Cognitive Science Society.
62. *Zheng, Y.*, & Hsiao, J. H. (2020). Audiovisual Information Processing in Emotion Recognition: An Eye Tracking Study. Poster presented at *the 42nd Annual Conference of the Cognitive Science Society*. Cognitive Science Society.
63. Hsiao, J. H., *Chan, K. Y.*, Du, Y. & Chan, A. B. (2019). Understanding individual differences in eye movement pattern during scene perception through hidden Markov modeling. Poster presented at *the 41st Annual Conference of the Cognitive Science Society*. Abstract published in A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 3283). Montreal, QB: Cognitive Science Society.
64. *An, J.*, & Hsiao, J. H. (2019). Modulation of mood on eye movement pattern and performance in face recognition. Abstract published in A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 3397). Montreal, QB: Cognitive Science Society.
65. *Chan, F. H. F.*, Barry, T. J., Chan, A. B., & Hsiao, J. H. (2019). Hidden Markov modelling of eye movements in social anxiety: a data-driven machine-learning approach to eye-tracking research in psychopathology. Poster presented at *the Anxiety & Depression Conference*, Chicago, USA.
66. *Tso, R. V. Y.*, Chan, T. C., Hsiao, J. H., Kwok, C. W., Lin, D., & Liu, D. (2019). The associations between visual spatial attention, holistic processing and reading abilities in Chinese adolescents with and without dyslexia. Poster presented at *the Annual Conference of the Society for the Scientific Study of Reading*, Toronto, Canada.
67. *Tso, R. V. Y.*, Chan, R. T. C., & Hsiao, J. H. (2019). When is a visual perceptual deficit more holistic but less right-lateralized? The case of high-school students with dyslexia in Chinese. Poster presented at *the 41st Annual Conference of the Cognitive Science Society*.

68. *Cheng, Z.*, Hayward, W. G., Chan, A. B., & Hsiao, J. H. (2018). Optimal face recognition performance involves a balance between global and local information processing: Evidence from cultural difference. Poster presented at *the 40th Annual Conference of the Cognitive Science Society.*
69. Hsiao, J. H., *Chan, H. F.*, *Li, S. K.*, & Chan, A. B. (2018). Does face-drawing experience enhance face processing abilities? Evidence from hidden Markov modeling of eye movements. Poster presented at *the Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *18*, 561.
70. *Chan, C. Y. H.*, Chan, A. B., Lee, T. M. C., & Hsiao, J. H. (2018). Eye movement patterns in face recognition are associated with cognitive decline in older adults: an HMM approach. Poster presented at *the Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *18*, 231.
71. *Chan, C. Y. H.*, Chan, A. B., Lee, T. M. C., & Hsiao, J. H. (2017). Analytic eye movement patterns in face recognition are associated with enhanced face recognition performance and top-down control of visual attention. Poster presented at *the Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *17,* 1144.
72. *Tso, R. V. Y.*, Cheung, W. M., Au, T. K. F., & Hsiao, J. H. (2017). What enhances/reduces holistic processing in perceptual expertise: experience in writing/drawing versus component composition. Poster presented at *the Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *17,* 1039.
73. *Li, T. K.*, *Chan, H. Y. V.*, *Li. L.*, & Hsiao, J. H. (2017). How does music reading expertise modulate visual processing of English words? Poster presented at *the 39th Annual Conference of the Cognitive Science Society*.
74. *Tso, R. V. Y.*, *Chen, H.*, *Yeung, Y. A.*, Au, T. K. F., & Hsiao, J. H. (2017). Right hemisphere lateralization a holistic processing do not always go together: An ERP investigation of a training study. Poster presented at *the 39th Annual Conference of the Cognitive Science Society*.
75. *Zhang, J.*, Lau, E. Y. Y., & Hsiao, J. H. (2017). Sleep deprivation compromises the effectiveness of emotion regulation strategies: an ERP study. Poster presented at *the Annual Meeting of the Associated Professional Sleep Societies (SLEEP 2017)*, Boston, USA. Abstract published in *Sleep*, *40*, A40.
76. *Tso, R. V. Y.*, *Lee, C. W. L.*, Cheung, W. M., Au, T. K. F., & Hsiao, J. H. (2016). Reconstructing Chinese characters without writing: enhancing holistic processing and orthographic awareness. Poster presented at *the Annual Meeting of the Society for the Scientific Study of Reading*.

77. *Zhang, J.*, Lau, E. Y. Y., & Hsiao, J. H. (2016). Sleep deprivation modulates resting-state slow wave/fast wave ratio and cognitive reappraisal of emotional stimuli: an EEG study. Poster presented *at the 23rd Congress of the European Sleep Research Society*. Abstract published in *Journal of Sleep Research, 25*(S1), 155.
78. *Zhang, J.*, Lau, E. Y. Y., & Hsiao, J. H. (2016). Resting-state theta/beta ratio changed without sleep: an EEG study. Poster presented at *the Hong Kong Psychological Society Annual Conference*.
79. *Zhang, J.*, Lau, E.Y.Y., & Hsiao, J.H. (2016). Habitual sleep quality modulated effects of sleep deprivation on emotional perception among young adults. Poster presented at *the CUHK Sleep 2016 conference*.
80. *Chan, C. Y. H.*, Wong, J. J., Chan, A. B., Lee, T. M. C., & Hsiao, J. H. (2016). Analytic eye movement patterns in face recognition are associated with better performance and more top-down control of visual attention: an fMRI study. Poster presented at *the 38th Annual Conference of the Cognitive Science Society*.
81. *Chuk, T.*, Chan, A. B., Shimojo, S., & Hsiao, J. H. (2016). Mind reading: Discovering individual preferences from eye movements using switch hidden Markov models. Poster presented at *the 38th Annual Conference of the Cognitive Science Society*.
82. *Brueggemann, S.*, Chan, A. B., & Hsiao, J. H. (2016). Hidden Markov modeling of eye movements with image information leads to better discovery of regions of interest. Poster presented at *the 38th Annual Conference of the Cognitive Science Society*.
83. *Li, T. K.*, Chung, S. T. L., & Hsiao, J. H. (2016). Music reading expertise modulates visual spans in both music note and English letter reading. Poster presented at *the 38th Annual Conference of the Cognitive Science Society*.
84. *Chan, C. Y. H.*, Chan, A. B., Lee, T. M. C., & Hsiao, J. H. (2015). Eye movement pattern in face recognition is associated with cognitive decline in the elderly. Poster presented at *the 37th Annual Conference of the Cognitive Science Society*.
85. *Cheung, T. K.*, & Hsiao, J. H. (2015). Complex mental addition and multiplication rely more on visuospatial than verbal processing. Poster presented at *the 37th Annual Conference of the Cognitive Science Society*.
86. *Chuk, T.*, Chan, A. B., & Hsiao, J. H. (2015). Hidden Markov model analysis reveals better eye movement strategies in face recognition. Poster presented at *the 37th Annual Conference of the Cognitive Science Society*.
87. *Chung, H. K. S.*, *Leung, J. C. Y.*, & Hsiao, J. H. (2015). Hemispheric differences in holistic processing: Experts' and novices' processing of Chinese characters. Poster presented at *the 37th Annual Conference of the Cognitive Science Society*.
88. *Liu, T.*, & Hsiao, J. H. (2015). Can experience with different types of writing system modulate holistic processing in speech perception? Poster presented at *the 37th Annual Conference of the Cognitive Science Society*.

89. *Tso, R. V.*, Au, T. K., & Hsiao, J. H. (2015). How do different training tasks modulate our perception and hemispheric lateralization in the development of perceptual expertise? Poster presented at *the 37th Annual Conference of the Cognitive Science Society*.
90. *Cheng, Z.*, *Chuk, T.*, Hayward, W. G., Chan, A. B., & Hsiao, J. H. (2015). Global and local priming evoke different face processing strategies: evidence from an eye movement study. Poster presented at *the Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *15*(12), 154.
91. Kong, N. K., *Chan, C. Y. H.*, Cheng, K. H. M., Hsiao, J. H., & Tseng, C. H. (2014). Perceptual bias in face processing in 5-12 month-old infants. Poster presented at *the 10th Asia-Pacific Conference on Vision (APCV 2014)*, Takamatsu, Japan, 19 – 22 July, 2014.
92. *Chen, J.*, & Hsiao, J. H. (2014). Right hemisphere dominance in nonconscious processing. Poster presented at *the Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *14*(10), 1313.
93. *Chung, H.*, *Liu, J.*, & Hsiao, J. H. (2014). How does reading direction modulate perceptual and visuospatial attention biases? Poster presented at *the Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *14*(10), 824.
94. *Galmar, B.*, *Chung, H.*, & Hsiao, J. H. (2014). Face drawing experience is associated with better face recognition performance and reduced left-side bias in face perception. Poster presented at the *Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *14*(10), 1260.
95. *Liu, T.*, & Hsiao, J. H. (2014). Neural correlates of font sensitivity effects in the perception of simplified and traditional characters. Poster presented at the *Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *14*(10), 181.
96. *Chuk, T.*, *Luo, X.*, Crookes, K., Hayward, W., Chan, A. B., & Hsiao, J. H. (2014). Caucasian and Asian eye movement patterns in face recognition: A computational exploration using hidden Markov models. Poster presented at *the Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *14*(10), 1212.
97. *Tso, R.*, *Leung, C.*, Au, T., & Hsiao, J. H. (2014). Writing reduced holistic processing but does not facilitate reading: The case in children with developmental dyslexia. Poster presented at *the Annual Meeting of Vision Sciences Society*, St. Pete Beach, Florida, USA. Abstract published in *Journal of Vision*, *14*(10), 182.

98. *Chung, H.*, & Hsiao, J. H. (2013). Hemispheric difference in holistic processing in Chinese character and face recognition. Poster presented at the *Asia Pacific Conference on Vision*, Suzhou, China. Abstract published in *PsyCh Journal*, *2*(Suppl. 1), 20.
99. *Chen, J.*, & Hsiao, J. H. (2013). Hemispheric asymmetry in nonconscious processing. Poster presented at the *Proceedings of the 35th Annual Conference of the Cognitive Science Society*.
100. *Galmar, B.*, & Hsiao, J. H. (2013). Computational exploration of task and attention modulation on holistic processing and left side bias effects in face recognition: the case of face drawing experts. Poster presented at *the 35th Annual Conference of the Cognitive Science Society*.
101. *Tso, R. V. Y.*, Au, T. K., & Hsiao, J. H. (2013). Expert marker of Chinese character recognition: Left-side bias versus holistic processing? Poster presented at *the 35th Annual Conference of the Cognitive Science Society*.
102. *Tso, R. V. Y.*, *Lau, T.*, *Xu, M.*, Au, T. K., & Hsiao, J. H. (2012). Writing experience changes our visual perception: The case of Chinese character recognition. Poster presented at *the Hong Kong Psychological Society Annual Conference*, Hong Kong, China. **[Best Poster Award]**
103. Hsiao, J. H., Zhang, Z., *Lam, L.*, *Cheung, K.*, &, Hu, Y. (2012). Temporal dynamics of structure and phonetic radical modulation in Chinese character pronunciation. Poster presentation at *the Human Brain Mapping Conference*, Beijing, China.
104. Hsiao, J. H., &, *Wong, Y. K. L.* (2012). A right visual field advantage without left hemisphere lateralization in music notation reading. Poster presentation at *the Annual Meeting of the Vision Sciences Society*; Abstract Published in *Journal of Vision*, *12*(9), 534.
105. *Liu, T.*, & Hsiao, J. H. (2012). The perception of simplified and traditional Chinese characters in the eye of simplified and traditional Chinese readers. Poster presentation at *the Annual Meeting of the Vision Sciences Society*; Abstract Published in *Journal of Vision*, *12*(9), 533.
106. *Tso, R. V. Y.*, Au, T. K., &, Hsiao, J. H. (2012). Writing facilitates learning to read in Chinese through reduction of holistic processing: A developmental study. Poster presentation at *the Annual Meeting of the Vision Sciences Society*; Abstract Published in *Journal of Vision*, *12*(9), 530. **[Student travel award winner!]**
107. *Tso, R. V. Y.*, Au, T. K., & Hsiao, J. H. (2012). Writing facilitates learning to read in Chinese through reduction of holistic processing: A developmental study. Poster presented at *the 34th Annual Conference of the Cognitive Science*.
108. Cipollini, B., Hsiao, J. H., & Cottrell, G. (2012). Connectivity asymmetry can explain visual hemispheric asymmetries in local/global, face, and spatial frequency processing. Poster presented at *the 34th Annual Conference of the Cognitive Science Society*.

109. *Wong, Y. K.*, & Hsiao, J. H. (2012). Reading direction is sufficient to account for the optimal viewing position in reading: The case of music reading. Poster presented at *the 34th Annual Conference of the Cognitive Science Society*.
110. Hsiao J. H., & *Liu, T.* (2011). Optimal viewing position in Face recognition. Poster presented at *the Asia-Pacific Conference on Vision*, Hong Kong. Abstract published in *i-Perception*, *2*(4), 244.
111. Hsiao, J. H., *Lam, L.*, & *Cheung, K.* (2011). Temporal dynamics of the modulation of character structure and phonetic radical in Chinese character processing: an ERP study. Poster presented at *the Asia-Pacific Conference on Vision*, Hong Kong. Abstract published in *i-Perception*, *2*(4), 266.
112. Hsiao, J. H., & *Cheung, K. C. F.* (2011). Holistic processing and right hemisphere lateralization do not always go together: Evidence from computational modeling. Poster presented at *the Asia-Pacific Conference on Vision*, Hong Kong. Abstract published in *i-Perception*, *2*(4), 242.
113. Hsiao, J. H., & *Cheng, L.* (2011). Differential hemispheric processing in the recognition of Chinese characters with different structures in foveal and parafoveal vision. Poster presented at *the Asia-Pacific Conference on Vision*, Hong Kong. Abstract published in *i-Perception*, *2*(4), 265.
114. *Lee, C.*, & Hsiao, J. H. (2011). Within-category advantage in perceiving color contrast: a new case of categorical perception. Poster presented at *the Asia-Pacific Conference on Vision*, Hong Kong. Abstract published in *i-Perception*, *2*(4), 385.
115. Hsiao, J. H., & *Cheung, K.* (2011). The modulation of word type frequency on hemispheric lateralization in visual word recognition: Evidence from modeling Chinese character recognition. Poster presented at *the 33rd Annual Conference of the Cognitive Science Society*.
116. *Lam, S. M.*, & Hsiao, J. H. (2011). Bilinguals have different hemispheric lateralization in visual word processing from monolinguals. Poster presented at *the 33rd Annual Conference of the Cognitive Science Society*.
117. *Lam, S. M.*, & Hsiao, J. H. (2010). Do bilinguals have a different hemispheric lateralization in visual processing from monolinguals? Poster presentation at *the Annual Meeting of the Vision Sciences Society*; Abstract Published in *Journal of Vision*, 10(7), 618.
118. Hsiao, J. H., & Cottrell, G. W. (2009). What is the cause of left hemisphere lateralization of English visual word recognition? Pre-existing language lateralization, or task characteristics? Poster presented at *the 31st Annual Conference of the Cognitive Science Society*.
119. Hsiao, J. H., & Cottrell, G. W. (2008). Perception of Chinese characters in novices' and experts' eyes: Similarities and differences between face and Chinese character

recognition. Poster presentation at *the Annual Meeting of the Vision Sciences Society*; Abstract Published in *Journal of Vision*, *8*(6), 966.

120. Hsiao, J. H., Shahbazi, R., & Cottrell, G. W. (2008). A differential encoding account of hemispheric asymmetry in visual perception. Poster presented at *the Cognitive Neuroscience Society Meeting*, San Francisco, USA.
121. Hsiao, J. H., & Cottrell, G. W. (2007). The influence of number of eye fixations on face recognition. Poster presentation at *the Annual Meeting of the Vision Sciences Society*; Abstract Published in *Journal of Vision*, *7*(9), 494.
122. Hsiao, J. H. & Cottrell, G. W. (2007). Hemispheric interaction in the N170 expertise marker: Phonological modulation in Chinese character recognition. Poster presentation at *the CVR Conference, York University*, Canada.
123. Hsiao, J. H., Shillcock, R., & Lee, C. (2006). ERPs reveal differential processing of Chinese characters in the male and the female brain. Poster presentation at *the Twelfth Annual Meeting of the Organization of Human Brain Mapping*, Florence, Italy.
124. Hsiao, J. H., Shillcock, R., & Lavidor, M. (2005). The semantic radical combinability effects in Chinese character recognition: an rTMS study. Poster presentation at *the Twenty Seventh Annual Conference of the Cognitive Science Society*, Stresa, Italy.
125. Hsiao, J. H. (2002). Strong systematicity in connectionist networks. Poster presentation at *the Twelfth Annual Meeting of Canadian Society for Brain, Behavior, and Cognitive Science*, Vancouver, Canada.

External Peer-Reviewed Competitive Research Grants

1. *General Research Fund (GRF) Grant* (Co-I; PI: Esther Lau). Title: Why lose sleep for work if sleep works for you? Neurocognitive affective benefits of home -based sleep extension in chronically sleep-restricted emerging adults. 2024 – 2026
2. *General Research Fund (GRF) Grant* (Co-I; PI: Will Hayward). Title: Manipulating familiarity in human face recognition. 2024 – 2026
3. *General Research Fund (GRF) Grant* (Co-I; PI: Ping Li). Title: Technologies, Data, and Learning: Digital language learning (DLL) and second language representation. 2024 – 2026
4. ***Theme-based Research Scheme (TRS) Grant*** (**Co-PI**; PC: Pheng Ann Heng). Title: Institute of Medical Intelligence and XR. 2022-2027.
5. ***Collaborative Research Fund (CRF) Grant*** (**Co-PI**; PC: Gloria Wong). Title: Effectiveness and cost-effectiveness of Technology-enriched cognitive stimulation therapy (teleCST) and carer support. 2022-2024.

6. ***Collaboration Contract, Huawei Hong Kong Research Centre***, Huawei Tech Investment Co Ltd. Title: 认知驱动的 AI 可解释性研究与 XAI 设计范式 (Human cognition driven AI interpretability study and XAI design paradigm). 2021-2023.
7. *General Research Fund (GRF) Grant* (PI), Research Grant Council of Hong Kong. Title: Does teaching children how to scan faces facilitate their face recognition? 2022-2024
8. ***Collaborative Research Fund (CRF) Grant*** (**Project Coordinator**) (**Success rate =15.5%).** Title: Impact of mask-use and social distancing during COVID-19 and NID pandemic on face and facial expression recognition. 2021-2024
9. *General Research Fund (GRF) Grant* (Co-I; PI: Julie Liao). Title: Can we prime sustainable food choice? A mix-methods study. 2021 – 2022
10. *General Research Fund (GRF) Grant* (Co-I; PI: Yuen Yi Lo). Title: Investigating the role of language in CLIL assessments through examining teachers' and students' cognitive processes. 2019-2020
11. *General Research Fund (GRF) Grant* (Co-I; PI: Gang Peng). Title: General auditory or speech-specific origin? Talker normalization revisited. 2019-2021
12. *General Research Fund (GRF) Grant* (PI), Research Grant Council of Hong Kong. Title: Understanding the association between eye movement patterns and face recognition performance using hidden Markov models. 2018-2021
13. *General Research Fund (GRF) Grant* (Co-I; PI: Stanley S.C. Hui), Research Grant Council of Hong Kong. Title: Taichi vs. Walking in Promoting Mental Health in Adults. 2018-2020
14. *General Research Fund (GRF) Grant* (Co-I; PI: Esther Y.Y. Lau), Research Grant Council of Hong Kong. Title: The Impact of Sleep Deprivation on Emotional Functioning and Its Electroencephalographic (EEG) Correlates. 2018-2019
15. *Midstream Research Programme for Universities (MRP)* (Co-I; PC: Joseph Kwan), Innovation & Technology Fund, Hong Kong. Title: Innovative IT Platform to Enable Remote Group Cognitive Stimulation Therapy For Better Cognition And Well-being In Older Dementia Patients And Their Caregivers: The FaceCog Project. 1/03/2018-29/02/2020 (Project awarded but then cancelled by ITF due to PC relocating overseas)
16. *General Research Fund (GRF) Grant* (Co-I; PI: Sherry K.W. Chan), Research Grant Council of Hong Kong. Title: Exploring the mechanisms of self-referential gaze perception and its potential as an endophenotype in patients with schizophrenia-spectrum disorder. 2015-2018
17. *Germany/HK Joint Research Scheme* (Co-I; PIs: Chan & Eckhardt), Research Grant Council of Hong Kong. Title: Understanding behavioral patterns in information system usage in older population using eye tracking. 2015-2016

18. *General Research Fund (GRF) Grant* (PI), Research Grant Council of Hong Kong. Title: How does writing/drawing experience enhance visual expertise? 2014-2018
19. *Early Career Scheme (ECS) Grant* (PI), Research Grant Council of Hong Kong. Title: How does music notation reading experience influence word reading? 2013-2015
20. *General Research Fund (GRF) Grant* (PI), Research Grant Council of Hong Kong. Title: The modulation of different visual-to-auditory mapping tasks in the development of visual expertise. 2011-2014
21. *General Research Fund (GRF) Grant* (PI), Research Grant Council of Hong Kong. Title: The two sides of cognition: Hemispheric processing of face and word recognition. 2009-2012
22. *Junior Scholar Grant* (PI), Chiang Ching-kuo Foundation for International Scholarly Exchange, Taiwan, 2008
23. *Grant for British-Taiwan Joint Projects* (Co-I; PIs: Shillcock & Lee), the British Academy, 2005

TEACHING & LEARNING

Postgraduate Student Supervision (Total = 34; 22/34 as Primary Supervisor)

1. Fung, Herrick, Full-time, MPhil (As Primary Supervisor, 01/09/2022-31/08/2023). Status: Current student.
2. Xing, Wei, Part-time, MPhil (As Primary Supervisor, 01/09/2022-31/08/2025). Status: Current student.
3. Yang, Yumeng Alice, Full-time, MPhil. (As Primary Supervisor, 01/09/2022-31/08/2024). Status: Current student.
4. Teng, Xiaoru, Full-time, PhD. (As Primary Supervisor, 01/09/2022-31/08/2026). Status: Current student.
5. Qi, Ruoxi, Full-time, PhD. (As Primary Supervisor, 01/09/2022-31/08/2026). Status: Current student.
6. Zuo, Wang, Full-time, PhD. (As Co-Supervisor; Primary Supervisor: Dr. Xiao Hu, Faculty of Education, 01/09/2021-31/08/2025). Status: Current student.
7. Liao, Weiyan, Full-time, PhD. (As Primary Supervisor, 01/09/2021-31/08/2024). Status: Current student.
8. Zheng, Yueyuan, Full-time, PhD. (As Primary Supervisor, 01/02/2021-01/02/2024). Status: Current student.
9. Kwok, Jocelyn Ching Yan, Full-time, PhD. in Educational Psychology (As Primary Supervisor, 01/09/2020-31/08/2022). Status: current student

10. Liao, Weiyan, Full-time, MPhil. (As Primary Supervisor, 01/09/2019-31/08/2021). Status: Current student.
11. Zheng, Yueyuan, Full-time, MPhil. (As Primary Supervisor, 01/01/2019-31/12/2020). Thesis title: The role of eye movements in multimodal information processing: the case of documentary comprehension and emotion recognition. Status: Graduated.
12. Zou, Ivan Yifan, Full-time, PhD. (As Co-Supervisor, 2019-now; Primary Supervisor: Dr. Youn Kim, Department of Music). Status: Graduated
13. Teng, Xing San, Full-time PhD. (As Co-Supervisor, 2019-now; Primary Supervisor: Dr. Yuenyi Lo, Faculty of Education). Status: Current student.
14. Jin, Rui, Full-time, MPhil. (As Co-Supervisor, 01/01/2019-31/12/2020; Primary Supervisor: Dr. Xiaoqing Hu). Status: Current student.
15. Zeng, Shengzi, Full-time, PhD. (As Co-Supervisor, 01/09/2018-31/08/2022; Primary Supervisor: Dr. Xiaoqing Hu). Status: Current student.
16. Lin, Xuanyi, Full-time PhD. (As Co-Supervisor, Primary Supervisor: Dr. Xiaoqing Hu, 01/09/2018-31/08/2022). Status: Current student.
17. Tin Wai Forrest Cheung, Full-time PhD. (As Co-Supervisor, Primary Supervisor: Dr. XS Li, 01/03/2018-28/02/2022). Status: Current student.
18. Zhong, Nianzeng, Full-time, PhD. (As Co-Supervisor, 01/10/2017-31/09/2021; Primary Supervisor: Prof. William Hayward). Status: Current student.
19. Chan, Hui Fei, Full-time, MPhil. (As Co-Supervisor, 01/09/2018-31/08/2020; Primary Supervisor: Dr. Tom Barry). Status: Graduated.
20. Yang, Xiaobo, Full-time, MPhil. (As Co-Supervisor, 01/09/2018-31/08/2020; Primary Supervisor: Dr. Shirley Li). Status: Graduated.
21. Tep Jinxiao Zhang, Full-time MPhil. (As Primary Supervisor, 01/09/2015-31/08/2017). Thesis title: The impact of sleep loss on emotion regulation and emotional perception in young adults. Status: Graduated (enrolled in PhD program at Stanford University)
22. Stephan Brueggemann, Full-time PhD. (As Co-Supervisor, Primary Supervisor: Dr. JA Saunders, 01/01/2015-31/01/2018). Thesis title: Spatiotemporal dynamics of the face recognition process. Status: Graduated.
23. Chan, Yui Hang Cynthia, Full-time PhD. (As Primary Supervisor, 2014-2019). Thesis title: Individual differences in eye movement patterns are associated with cognitive performance: behavioral and neural evidence in face perception. Status: Graduated
24. Cheung, Kwun Leuk Tommy, Full-time MPhil. (As Primary Supervisor, 01/09/2014-31/08/2016). Thesis title: The process of complex mental arithmetic: a comparison between novices and piano players. Status: Graduated.

25. Li, Tze Kwan Sara, Full-time PhD. (As Primary Supervisor, 01/01/2014-31/12/2017). Thesis title: Music reading expertise modulates word and text reading. Status: Graduated. (Assistant Professor, Open University of Hong Kong)
26. Tso, Ricky Van Yip, Full-time PhD. (As Primary Supervisor, 01/09/2013-31/08/2016). Thesis title: The neural correlates and behavioural expertise markers of word recognition is modulated by the type of learning experiences. Status: Graduated (Assistant Professor, Education University of Hong Kong)
27. Chung, Ka Shing Harry, Full-time MPhil. (As Primary Supervisor, 01/09/2013-31/08/2015). Thesis title: Revisiting hemispheric asymmetry: perceptual representation and experiential modulation. Status: Graduated (then enrolled and graduated from M.Soc.Sci. in Clinical Psychology Program, HKU).
28. Cheng, Zhijie Cherry, Full-time PhD. (As Primary Supervisor, 01/09/2012-31/08/2019). Thesis title: The Role of Configural and Featural Information Processing in Face Recognition. Status: Withdrawn due to personal reasons.
29. Chuk, Tin Yim Tim, Full-time PhD. (As Primary Supervisor, 01/09/2012-31/08/2016). Thesis title: Understanding eye movements in face processing using hidden Markov models. Status: Graduated (Data Scientist, Social Career and Leighton-Chun Wo Joint Venture)
30. Chen, Jing, Full-time MPhil. (As Primary Supervisor, 01/09/2012-31/08/2014). Thesis title: Distinction between Nonconscious and Conscious Vision: Evidence from Hemispheric Asymmetry Effects. Status: Graduated (Associate Professor, Shanghai University of Sports)
31. Cheung, Man Ching Jasmine, Part-time PhD. (As Co-Supervisor, 01/01/2012-31/01/2017; Primary Supervisor: Prof. Terry Au). Thesis title: Effectiveness of attention bias modification treatment for children with social anxiety problem. Status: Graduated (Senior Clinical Psychologist, Department of Health, Hong Kong)
32. Liu, Tianyin, Full-time PhD. (As Primary Supervisor, 01/09/2011-31/08/2015). Thesis title: How does learning experience modulate expertise markers in the visual and auditory domains. Status: Graduated (Research Assistant Professor, HKU)
33. Tso, Ricky Van Yip, Full-time MPhil. (As Primary Supervisor, 01/09/2010-31/08/2012). Thesis title: Motor experience modulates perceptual representation of objects: the case of Chinese character recognition. Status: Graduated then enrolled in our PhD program (Assistant Professor, Education University of Hong Kong) **[Outstanding Research Postgraduate Student Award winner]**
34. Lam, Sze Man Fanny, Full-time MPhil. (As Primary Supervisor, 01/09/2009-31/08/2011). Thesis title: How does bilingual experience modulate visual processing? Status: Graduated

Postdoctoral Fellow Supervision

1. Liu, Guoyang (2022-2023)
2. Li, Tze Kwan Sara (2018)
3. Galmar, Bruno (2012-2015)
4. Schmitz, Remy (2012-2013)
5. Wong, Kwai Ling Yetta (2010-2012)

SERVICES

Consultancy

- **Consultant, Huawei Research (HK)**, on "Roadmap of designing computational metric for XAI from cognitive perspective", Dec. 28, 2020 – June 14, 2023

Service to International Professional Organizations

Editorship and Editorial Board Membership

1. **Editor-in-Chief, *British Journal of Psychology*, Nov. 2022 to now.**
   (As the first Asian Editor-in-Chief in the journal's over-100-year history)
2. **Section Editor, *Cognition*, June 2021 – now**
3. Consulting Editor, *Visual Cognition*, Oct. 2020 – now
4. Associate Editor, *Cognitive Science*, July 2018 – Dec. 2022.
5. Member of the Program Committee, *Proceedings of the Annual Conference of the Cognitive Science Society*, 2016-now
6. Academic Editor, *PLOS One*, Jan 2014 – Jan 2021

Services for International Societies/Conferences

- **Governing Board, Cognitive Science Society, Aug. 2022 – July 2028.**
- Co-organizer, *Cog Sci 2022 Hong Kong Meetup & Symposium*, 2022
- Organizer, *Cog Sci 2021 Hong Kong Meetup & Symposium*, 2021
- Program Committee, *Annual Meetings of Cognitive Science Society*, 2016 – now
- Program Chair, *Asia Pacific Conference on Vision 2011*, Hong Kong, 2011

15 Jan., 2024