# Jinyu Wang

Third-year PhD Candidate
Interdisciplinary Design and Media Program
Institute for Cognitive and Brain Health
Tel: (781) 960-3562
Google Scholar: 8EWXWAMAAAAJ
Email: wang.jinyu2@northeastern.edu

## Education

2023 – 2028 (Expected)

Ph.D. (Interdisciplinary Design & Media), College of Art, Media and Design, Center for Cognitive and Brain Health, Northeastern University, Boston, US. Advisor: Dr. Psyche Loui; Co-advisor: Dr. Stephanie Noble

2019 – 2022

M.Ed. (Psychology), Medical Psychological Center, The Second Xiangya Hospital, Central South University (GPA: **3.89/4**, **91.54/100**), Changsha, China. Advisor: Dr. Daxing Wu

2015 – 2019

B.S. (Psychology), Department of Psychology, Hunan Normal University (GPA: **3.51/4**, **84.45/100**, Rank: **9 out of 63**), Changsha, China. Advisor: Dr. Yanhui Xiang

## Publications

***Published/Accepted Articles***

**Wang, J.**, Kathios, N., Ou, Y., Curtiss, J., Wu, D., & Loui, P. (2026). A Cross-Cultural Comparison of Individual Differences in Musical Reward. *Music Perception: An Interdisciplinary Journal*, 1-20. https://doi.org/10.1525/mp.2026.2459501

Han, K. Y., **Wang, J.**, Kubit, B. M., Parrish, C., & Loui, P. (2025). Functional Connectivity of Auditory, Motor, and Reward Networks at Rest and During Music Listening. *Brain Sciences*, *16*(1), 15. https://doi.org/10.3390/brainsci16010015

Loui, P., & **Wang, J.** (2025). Music, Emotion, and Reward. In J. Armony & P. Vuilleumier (Eds.), *The Cambridge Handbook of Human Affective Neuroscience* (2 ed., pp. 288-305). Cambridge University Press. https://doi.org/10.1017/9781009342919.018

**Wang, J.**, Xu, M., Jin, Z., Xia, L., Lian, Q., Huyang, S., & Wu, D. (2021). The Chinese version of the Barcelona Music Reward Questionnaire (BMRQ): Associations with personality traits and gender. *Musicae Scientiae*, *27*(1), 218-232. https://doi.org/10.1177/10298649211034547

Jiang, X., & **Wang, J.*** (Corresponding author) (2020). The causal relationship between envy and depression: A cross-lagged regression analysis. *Social Behavior and Personality*, 48(12),

1-9. https://doi.org/10.2224/sbp.9444

Xu, M., **Wang, J.**, Jin, Z., Xia, L., Lian, Q., Huyang, S., & Wu, D. (2021). The Behavioral Inhibition System/Behavioral Activation System Scales: Measurement invariance across gender in Chinese university students. *Frontiers in Psychology*, 12(5760). https://doi.org/10.3389/fpsyg.2021.681753

Xia, L., Su, C., **Wang, J.**, Xie, L., Sun, K., & Wu, D. (2025). Abnormal EEG activity in major depressive disorder during musical reward experience. *Psychiatry Research: Neuroimaging*, 112083. https://doi.org/10.1016/j.pscychresns.2025.112083

Peng, C., Wang, K., **Wang, J.**, Wassing, R., Eickhoff, S. B., Tahmasian, M., & Chen, J. (2025). Neural correlates of insomnia with depression and anxiety from a neuroimaging perspective: A systematic review. *Sleep Medicine Reviews*, *81*, 102093. https://doi.org/10.1016/j.smrv.2025.102093

Quan, Y., Lo, C. Y., Wolff, L., **Wang, J.**, Olsen, K. N., & Thompson, W. F. (2025). Cognitive benefits of music in aerobic exercise: Evidence from a Bayesian network meta-analysis in adults with mild cognitive impairment. *Archives of Gerontology and Geriatrics*, *134*, 105848. https://doi.org/10.1016/j.archger.2025.105848

Jin, Z., Huyang, S., Li, Q., Jiang, L., Yan, Y., Xu, M., **Wang, J.**, ... & Wu, D. (2025). Altered music emotion experiences of congenital amusia: from the perspective of reward. *BMC psychology*, *13*(1), 1316. https://doi.org/10.1186/s40359-025-03664-2

Jin, Z., Lu, X., Huyang, S., Yan, Y., Jiang, L., **Wang, J.**, Xu, M., Li, Q., & Wu, D. (2021). Impaired face recognition is associated with abnormal gray matter volume in the posterior cingulate cortex in congenital amusia. *Neuropsychologia*, 156, 107833. https://doi.org/10.1016/j.neuropsychologia.2021.107833

Jin, Z., Huyang, S., Jiang, L., Yan, Y., Xu, M., **Wang, J.**, Li, Q., & Wu, D. (2021). Increased resting-state interhemispheric functional connectivity of posterior superior temporal gyrus and posterior cingulate cortex in congenital amusia. *Frontiers in Neuroscience*, 15(490). https://doi.org/10.3389/fnins.2021.653325

***In preparation***

**Wang, J.**, Kathios, N., Kubit, B., Lopez, K., Kim, J., Large, E., Noble, S., Loui, P. (*In Preparation*) Hippocampal Cingulum White-Matter Integrity Mediates Musical Reward Sensitivity Changes in Aging.

## Presentations

*Cognitive Neuroscience Society (CNS) 2026 Annual Meeting* *03/2026*

Poster: From Empirical to Simulated Brains: Using Digital Twin Models to Identify Therapeutic Targets in MCI

*Boston Precision Brain & Mental Health Hack 2025* *10/2025*

Open Hack Presentation: From Empirical to Simulated Brains: Using Digital Twin Models to Identify Therapeutic Targets in MCI

*18th International Conference on Music Perception and Cognition* *07/2025*

Talk: White matter predictors for musical and general reward in mild cognitive impairment

*Cognitive Neuroscience Society (CNS) 2025 Annual Meeting* *03/2025*
Poster: Brain Structural Predictors of Musical Reward Sensitivity in Older and Young Adults

*BrainHack 2024* *12/2024*
Lightening talk: Age-dependent Predictors of Musical Reward Sensitivity in Brain Structures

*Society for Music Perception and Cognition 2024 Conference* *07/2024*
Talk: A cross-cultural comparison of individual differences in musical reward

*CAMD PhD Symposium 2024* *03/2024*
Talk: Music and Brain Health; Poster: A Cross-Cultural Study of Musical Reward

*RISE 2024* *03/2024*
Poster: Getting in the Groove: High Groove Music's Effect on Working Memory

## Awards and Scholarships

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| 2024 | Student Research Award, Society for Music Perception and Cognition |
| 2021 | Outstanding Student Award from Central South University |
| | First-class Postgraduate Academic Scholarship from Central South University |
| 2019 | Freshman Academic Scholarship from Central South University |
| | Outstanding Graduates from Hunan Normal University |
| 2018 | National Encouragement Scholarship from Hunan Normal University |
| 2017 | National Encouragement Scholarship from Hunan Normal University |
| | The Second Prize of Innovative Social Investigation Competition of Hunan Normal University |

## Programming & Experiment Skills

*Programming Language*: R, MATLAB, Python, Shell

*Software & Toolboxes*: Freesurfer, FSL, MRtrix, CONN, EEGLAB, Brainstorm, Psychtoolbox, PsychoPy, E-prime, AMOS, Mplus, G*Power, SPSS, FACTOR

*Experimental Experiences*: MRI, EEG, Eye tracking, Behavioral experiments, Survey

*Statistical Methods*: Machine Learning, Network analysis, Linear mixed model, Structural equation modeling, Cross-lagged analysis

## Working Experience

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| 2025 - Current | Teaching Assistant, Undergraduate Course: Music in Everyday Life. Instructor: Dr. James Gutierrez |
| 2023 - 2025 | Research Assistant, Music, Imaging, and Neural Dynamics Lab, Department of Music, Northeastern University, Boston, US, Advisor: Dr. Psyche Loui |
| 2022 - 2023 | Research Assistant, AI-Psy Lab, Department of Psychology and Behavioral Sciences, Zhejiang University, Hangzhou, China, Advisor: Dr. Ji Chen |

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| 2020 | Intern, Psychology Department, the Second Xiangya Hospital, Central South University, Changsha, China |
| 2018 | Intern, Psychology Internet Community Promotion, Hunan Kuka Information Technology Co., Ltd., Changsha, China |
| 2018 | Intern school counselor, Zhiyuan High School, Yueyang, China |
| 2017 | Intern, Psychiatry Department, Changsha Psychiatric Hospital, China |

## Certificates (selected)

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| 2021 | Certificate of Psychological Assessment, China Association for Mental Health |
| 2017 | Certificate of Psychological Counseling Level 3, China National Occupational Skill Testing Authority |