

Rui Ma

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EDUCATION

University of Electronic Science and Technology of China (UESTC)	Chengdu, China
• Master of Electronic Information Engineering	Cumulative GPA 3.67/4.0
• Bachelor of Biomedical Engineering	09/2022 - Present
	09/2018 - 06/2022

PUBLICATION

- [1] **Rui Ma**, Liangfeng Feng, Xiaolong Guo, et al. Effects of music composition on structural and functional connectivity in the orbitofrontal cortex, 2024, Brain-Apparatus Communication: A Journal of Bacomics (TBAC), 10.1080/27706710.2024.2346498
- [2] **Rui Ma**, Sijia Guo, Jing Lu. Modeling the hierarchy of the brain network for the music effect on cognitive aging, 2024, The Neurosciences and Music-VIII (Conference Abstract)

RESEARCH EXPERIENCE

Patient Intervention (MCI & controls) under Multisensory Stimulation	09/2022 - Present
Key Laboratory for Neuroinformation of Ministry of Education	Chengdu, China
& Baycrest Academy for Research and Education	University of Toronto
• Researching on task-state multisensory stimulation in MCI under EEG recording	
• Data processing: EEG recording, neural-variability, phase-locking value, microstate analysis, clustering & classification, ERP & time frequency, source analysis	

Music Training Intervention and Aging in Reward System	09/2022 - Present
Key Laboratory for Neuroinformation of Ministry of Education	Chengdu, China
• Modeling the directed and hierarchical architecture of the network in musical and aging interventions (Link)	
• Spontaneous activity in the basal ganglia during the activation state on aging in a music training intervention (Link)	
• Publishing paper: The Neurosciences and Music – VIII (NMVIII)	

Effects of Music Composition on Structural and Functional Connectivity to the Brain (Link)	09/2022 - Present
Key Laboratory for Neuroinformation of Ministry of Education	Chengdu, China
• Researching on the structural and functional connectivity with the region of orbitofrontal cortex in aging composers	
• fMRI data processing: fMRI data recording, diffusion tensor imaging (DTI), the based spatial statistics (TBSS)	
• Publishing paper: Brain-Apparatus Communication: A Journal of Bacomics (TBAC)	

HONORS & AWARDS

• First Prize, Excellent Individual in Summer Practice Activities	2019
• Top Ten Student Council President in UESTC	2020
• Model Student Scholarship	2020
• Yunhui Specialized Scholarship in UESTC	2021

TECHNICAL SKILL

• Programming	MATLAB (EEGLAB, Brainstorm, SPM, Dpabi, FSL), Python, C, CAD, E-prime, Endnote, GraphPad, R, SPSS
• English	CET-6 (508)

VOLUNTEERING

Council President – Undergraduate	01/2019 - 06/2020
• Delegated as the coordinator of a large-scale freshman welcoming event	
• Assisted teachers to help individual students with personal skills and academic research ability	
• Top Ten Student Council President in UESTC	
Team leader of teaching volunteer project (summer)	
• First Prize, Excellent Individual in summer volunteer activities	