Zijian Chen

Contact Information

email: zijianc@bu.edu

Research Focus

Clinical Brain Imaging (for aphasia and autism)

Education

Boston University, Boston, MA — 2023-Present
Ph.D. student in Electrical Engineering
Advisor: Archana Venkataraman

University of Wisconsin-Madison, Madison, WI — 2021-2023
M.A. in Mathematics

Shanghai Jiao Tong University, Shanghai, China — 2020-2022
Bachelor Minor in Mathematics

East China Normal University, Shanghai, China — 2018-2022
B.Sc. in Statistics

Publications

4. Chen, Z., Das, S. and Chung, M.K., 2023, Sulcal Pattern Matching with the Wasserstein Distance. In 2023 IEEE 20th International Symposium on Biomedical Imaging (ISBI) (pp. 1-5). IEEE.
3. Dakurah, S., Anand, D.V., Chen, Z., Chung, M.K. 2022, Modeling Cycles in Brain Networks Using Hodge Laplacian, Medical Image Computing and Computer Assisted Intervention - MICCAI 2022. Lecture Notes in Computer Science, vol 13431. Springer, Cham.
2. Chung, M.K., Chen, Z. 2022, Embedding of Functional Human Brain Networks on a Sphere. https://arxiv.org/abs/2204.03653
1. Liu, T., Chen, Z., Xu, J. 2021, Epidemiological characteristics and incubation period of SARS-CoV-2 during the 2020-2021 winter pandemic wave in north China: an observational study. J Med Virol.2021;1-6.

Invited Talks

Sulcal Pattern Matching with the Wasserstein Distance, 2023
ISBI 2023 Special section *Wasserstein Distance in Biomedical Imaging.*
Invited by Moo K. Chung

Review of Sample Size Calc. in Phase 3 SARS-CoV-2 Vaccine Clinical Trials, 2021
Shanghai Biostatistics Forum (SBF) Q3 Event, 2021.
Invited by Jin Xu.

Poster Presentations

Sulcal Pattern Matching with the Wasserstein Distance, 2023
ISBI 2023, Cartagena de Indias, Columbia.

Multiscale Representation of Brain Networks in the Hyperbolic Space, 2022
Computation and Informatics in Biology and Medicine Annual Retreat, UW-Madison.

Teaching and Mentoring

Madison Experimental Mathematics Lab @ UW-Madison — 2022
Mentor four students for undergraduate research project on Ergodic Theory and Dynamics.
Title: *Vectors of smallest slope for translation surfaces.*

Direct Reading Program @ UW-Madison — 2022
Topic of the semester: *Probabilistic perspectives in machine learning*

Teaching Assistant: Biostatistics @ ECNU — 2021
Job duty: Computer Lab Instructing, Grading, Office Hours, and Recitation.

Fellowship and Awards	**National First Prize** in Chinese Undergraduate Mathematical Modeling Contest.	2020
	National Third Prize in Chinese Undergraduate Mathematics Competition.	2019
	ECNU Outstanding Student Fellowship	2019,2020,2021
Coding Skills	Python, MATLAB, C++ (in descending order)	