

Zijian Chen

CONTACT INFORMATION	Email: zijianc@bu.edu Homepage: zchen.pro Address: 8 St. Mary's Street, PHO 409, Boston, MA 02215	
RESEARCH FOCUS	Clinical Brain Imaging (for aphasia and autism)	
EDUCATION	Boston University , Boston, MA Ph.D. student in Electrical Engineering Advisor: Archana Venkataraman	2023-Present
	University of Wisconsin-Madison , Madison, WI M.A. in Mathematics	2021-2023
	Shanghai Jiao Tong University , Shanghai, China Bachelor Minor in Mathematics	2020-2022
	East China Normal University , Shanghai, China B.Sc. in Statistics	2018-2022
PUBLICATIONS	<ol style="list-style-type: none">6. Chen, Z., Varkanitsa, M., Ishwar, P., Konrad, J., Betke, M., Kiran, S. and Venkataraman, A., 2024. A Lesion-aware Edge-based Graph Neural Network for Predicting Language Ability in Patients with Post-stroke Aphasia. arXiv preprint arXiv:2409.02303. <i>Accepted by MLCN workshop at MICCAI 2024.</i> [selected for oral]5. Chen, Z., Wang, J. and Venkataraman, A., 2024. QID²: An Image-Conditioned Diffusion Model for Q-space Up-sampling of DWI Data. arXiv preprint arXiv:2409.02309. <i>Accepted by CDMRI workshop at MICCAI 2024.</i> [selected for oral]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. [invited for special session talk]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. [student travel award]2. Chung, M.K., Chen, Z. 2022, Embedding of Functional Human Brain Networks on a Sphere. https://arxiv.org/abs/2204.036531. 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	<i>Oral presentations for conference papers are not listed here.</i> Sulcal Pattern Matching with the Wasserstein Distance , ISBI 2023 Special section <i>Wasserstein Distance in Biomedical Imaging</i> . Invited by Moo K. Chung	2023
	Review of Sample Size Calc. in Phase 3 SARS-CoV-2 Vaccine Clinical Trials , Shanghai Biostatistics Forum (SBF) Q3 Event, 2021. Invited by Jin Xu.	2021
POSTER PRESENTATIONS	<i>Poster presentations for conference papers are not listed here.</i> Multiscale Representation of Brain Networks in the Hyperbolic Space , Computation and Informatics in Biology and Medicine Annual Retreat, UW-Madison.	2022
TEACHING AND MENTORING	Graduate Student Teacher: EK381 @ Boston University Course name: Probability, Statistics, and Data Science for Engineers. Responsibilities: Discussion (coding+recitation), Grading, Office Hours.	2024

	Madison Experimental Mathematics Lab @ UW-Madison Mentor four students for undergraduate research project on Ergodic Theory and Dynamics. Title: <i>Vectors of smallest slope for translation surfaces.</i>	2022
	Directed Reading Program @ UW-Madison Topic of the semester: <i>Probabilistic perspectives in machine learning</i>	2022
	Teaching Assistant: Biostatistics @ ECNU Responsibilities: Computer Lab Instructing, Grading, Office Hours, and Recitation.	2021
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)	