

Jingwei Guo

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🏠 <https://jingweio.github.io>

EDUCATION	University of Liverpool Ph.D. in Electrical Engineering and Electronics Dec. 2019 - Present Advisor: Kaizhu Huang
	Xi'an Jiaotong-Liverpool University B.S. in Applied Mathematics Sep. 2014 - Aug. 2018 GPA (WES): 3.86/4.00
RESEARCH INTERESTS	My research interests focus on graph machine learning. I have been developing theories and algorithms to enhance Graph Neural Networks (GNNs), aimed at addressing the issues of oversmoothing, heterophily, long-range dependencies, and domain shifts. Currently, I am interested in applying these advancements to the biomedical field, e.g., modeling complex molecular interactions and relationships.
PUBLICATIONS	<i>Unraveling Batch Normalization for Realistic Test-Time Adaptation</i> – Zixian Su, Jingwei Guo , Kai Yao, Xi Yang, Qiufeng Wang, Kaizhu Huang. – Proceedings of the AAAI Conference on Artificial Intelligence (AAAI), 2024. <i>Graph Neural Networks with Diverse Spectral Filtering</i> – Jingwei Guo , Kaizhu Huang, Xinping Yi, Rui Zhang. – Proceedings of the ACM Web Conference (WWW), 2023. <i>Learning Disentangled Graph Convolutional Networks Locally and Globally</i> – Jingwei Guo , Kaizhu Huang, Xinping Yi, Rui Zhang. – IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 2022. <i>Adaptive Active Contour Model based Automatic Tongue Image Segmentation</i> – Jingwei Guo , Yikang Yang, Qingwei Wu, Jionglong Su, Fei Ma. – The 9th International Congress on Image and Signal Processing, BioMedical Engineering and Informatics (CISP-BMEI), 2016.
MANUSCRIPTS	<i>Rethinking Spectral Graph Neural Networks with Spatially Adaptive Filtering</i> – Jingwei Guo , Kaizhu Huang, Xinping Yi, Zixian Su, Rui Zhang. – Preprint, 2024. <i>ES-GNN: Generalizing Graph Neural Networks Beyond Homophily with Edge Splitting</i> – Jingwei Guo , Kaizhu Huang, Rui Zhang, Xinping Yi. – Under revision, TPAMI, 2024.
EXPERIENCE	Guest Lecturer DKU • ECE590: Deep Learning Spring 2024 Teaching Assistant XJTLU • CPT206: Computer Programming for Financial Mathematics Spring 2023 • CPT403: Object Oriented Programming Autumn 2022 • INT104: Artificial Intelligence Spring 2021 • INT202: Complexity of Algorithms Introduction Spring 2021 • CPT105: Introduction to Programming in Java Autumn 2020 Research Assistant • Deep Learning and Pattern Recognition Feb. 2024 - Present, DKU • Sano Medical Laboratories, Inc. Sep. 2018 - Feb. 2019, XJTLU • Summer Undergraduate Research Fellowship Summer 2016 & 2017, XJTLU
ACADEMIA SERVICES	Reviewer • Journals: TNNLS, Neural Networks, Neurocomputing, Cognitive Computation • Conferences: KDD 2024, ECML-PKDD 2024, ICPR 2024
TECHNICAL SKILLS	Programming Languages: Python, Java, Matlab Deep Learning Libraries: PyTorch, TensorFlow, DGL, PyG