Jingwei Guo

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EDUCATION	**University of Liverpool**	Sep. 2019 - Present
	Ph.D. in Electrical Engineering and Electronics	Advisor: Kaizhu Huang
	Xi'an Jiaotong-Liverpool University	Aug. 2014 - Jun. 2018
	B.S. in Applied Mathematics	GPA (WES): 3.86/4.00

RESEARCH INTERESTS

My research focuses on Graph Neural Networks, with a specific emphasis on addressing their challenges, including combating oversmoothing, handling graph heterophily, and capturing long-range dependencies.

PUBLICATIONS

Graph Neural Networks with Diverse Spectral Filtering
- **Jingwei Guo**, Kaizhu Huang, Xinping Yi, Rui Zhang.
- Proceedings of the ACM Web Conference (WWW), 2023: 306-316.

Learning Disentangled Graph Convolutional Networks Locally and Globally
- **Jingwei Guo**, Kaizhu Huang, Xinping Yi, Rui Zhang.
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 2022.

Adaptive Active Contour Model based Automatic Tongue Image Segmentation
- **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

Rethinking Spectral Graph Neural Networks with Spatially Adaptive Filtering
- **Jingwei Guo**, Kaizhu Huang, Xinping Yi, Zixian Su, Rui Zhang.
- *Under review, 2023.*

ES-GNN: Generalizing Graph Neural Networks Beyond Homophily with Edge Splitting
- **Jingwei Guo**, Kaizhu Huang, Rui Zhang, Xinping Yi.
- *Under review, 2022.*

Unraveling Batch Normalization for Realistic Test-Time Adaptation
- Zixian Su, **Jingwei Guo**, Kai Yao, Xi Yang, Qiufeng Wang, Kaizhu Huang.
- *Under review, 2023.*

EXPERIENCE

Teaching Assistant
- 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
- Sano Medical Laboratories, Inc. - *XJTLU* — Sep. 2018 - Feb. 2019
- Summer Undergraduate Research Fellowship - *XJTLU.* — Summer 2016 & 2017

ACADEMIA SERVICES

Reviewer for Journals
- TNNLS, Neural Networks, Neurocomputing, Cognitive Computation

TECHNICAL SKILLS

Programming Languages: Python, Java, Matlab
Deep Learning Libraries: PyTorch, TensorFlow, DGL, PyG