Jingwei Guo

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EDUCATION

University of Liverpool   Sep. 2019 - Mar. 2024
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

Graph Neural Networks, currently on their limitations within complex settings where nodes sharing distinct labels and features are tightly interconnected.

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.*

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

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

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.*   Jun. 2017 - Aug. 2017
• Summer Undergraduate Research Fellowship - *XJTLU.*   June. 2016 - Aug. 2016

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