

Jiaxing Xu (徐家兴)

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WORK EXPERIENCE

Saw Swee Hock School of Public Health, National University of Singapore (NUS)	Singapore
Research Fellow	Aug 2025 – Present
Research Interests: Graph Representation Learning, Brain Network Analysis, Medical Image Analysis	
College of Computing and Data Science, Nanyang Technological University (NTU)	Singapore
Research Fellow	Apr 2025 – Jul 2025
Research Assistant	Oct 2021 – Mar 2025

EDUCATION

Nanyang Technological University (NTU)	Singapore
PhD in Computer Science, advised by Yiping Ke	Oct 2021 – Feb 2025
Thesis: Brain Network Analysis by Graph Representation Learning	
Beihang University (BUAA)	Beijing, China
BS in Software Engineering, advised by Jie Tang	Sep 2016 - Jun 2020

SELECTED PUBLICATIONS (* indicates equally contributions, # indicates the corresponding author)

Journal Papers

- **Jiaxing Xu[#]**, Mengcheng Lan, Xia Dong, Kai He, Wei Zhang, Qingtian Bian, Yiping Ke
Multi-Atlas Brain Network Classification through Consistency Distillation and Complementary Information Fusion.
In *IEEE Journal of Biomedical and Health Informatics (JBHI)* (IF: 6.7)
- **Jiaxing Xu[#]**, Qingtian Bian, Xinhang Li, Aihu Zhang, Yiping Ke, Miao Qiao, Wei Zhang, Wei Khang Jeremy Sim, and Balázs Gulyás
Contrastive Graph Pooling for Explainable Classification of Brain Networks.
In *IEEE Transactions on Medical Imaging, 2024 (TMI)* (IF: 11.0).
PREMIA Best Student Paper Honourable Mention Award
- **Jiaxing Xu[#]**, Jinjie Ni, Yiping Ke
A Class-Aware Representation Refinement Framework for Graph Classification.
In *Information Sciences, 2024* (IF: 8.2).
- **Jiaxing Xu**, Kai He[#], Yue Tang, Wei Li, Mengcheng Lan, Yue Xun, Qika Lin, Peifan Ran, Yiping Ke, Mengling Feng
BrainPrompt+: Multi-Level Brain Prompt Learning for Knowledge-Guided Neurological Disorder Identification.
In *IEEE Transactions on Medical Imaging (TMI)* (IF: 11.0) (Under Review)
- **Jiaxing Xu[#]**, Xia Dong, Tiancheng Huang, Danyang Wu, Wei Zhang, Yiping Ke, Philip S. Yu
Multi-View Graph Learning in Brain Network Analysis: A Survey
In *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)* (IF: 8.9) (Under Review)
- Kai He, **Jiaxing Xu**, Qika Lin, Wenqing Wang, Zeyu Gao, Jialun Wu, Yucheng Huang, Mengling Feng[#]
External Retrievals or Internal Priors? From RAG to Epitome-Augmented Generation by Fuzzy Selection.
In *IEEE Transactions on Fuzzy Systems, 2025* (IF:9.8)
- Han Lei[#], **Jiaxing Xu**, Jinjie Ni, Yiping Ke
Rethinking the Message Passing for Graph-Level Representation Learning in a Category-Based View.
In *Engineering Applications of Artificial Intelligence, 2025 (EAAI)* (IF: 6.8).

Conference Papers

- **Jiaxing Xu^{**}**, Yongqiang Chen^{*}, Xia Dong, Mengcheng Lan, Tiancheng Huang, Qingtian Bian, James Cheng, Yiping Ke
BrainOOD: Out-of-distribution Generalizable Brain Network Analysis.
In *Proceedings of the 13th International Conference on Learning Representations (ICLR'25)*.
AI4X Conference Oral Presentation
- **Jiaxing Xu^{**}**, Kai He^{*}, Yue Tang, Wei Li, Mengcheng Lan, Xia Dong, Yiping Ke, Mengling Feng
BrainPrompt: Multi-Level Brain Prompt Enhancement for Neurological Condition Identification.
In *Proceedings of the 28th International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI'25)*.
Early Accept (Top 9%)

- Jiaxing Xu***, Aihu Zhang*, Qingtian Bian, Vijay Prakash Dwivedi and Yiping Ke
 Union Subgraph Neural Networks.
 In *Proceedings of the 38th Annual AAAI Conference on Artificial Intelligence (AAAI'24)*.
- Jiaxing Xu[#]**, Kai He, Mengcheng Lan, Qingtian Bian, Wei Li, Tieying Li, Yiping Ke, Miao Qiao
 Contrasformer: A Brain Network Contrastive Transformer for Neurodegenerative Condition Identification.
 In *Proceedings of the 33rd ACM International Conference on Information and Knowledge Management (CIKM'24)*.
- Jiaxing Xu***, Yunhan Yang*, David Tse Jung Huang*, Sophi Shilpa Gururajapathy*, Yiping Ke, Miao Qiao, Alan Wang, Haribalan Kumar, Josh McGeown, and Eryn Kwon
 Data-Driven Network Neuroscience: On Data Collection and Benchmark.
 In *Proceedings of the 37th Conference on Neural Information Processing Systems (NeurIPS'23)*.
- Han Lei, **Jiaxing Xu**, Xia Dong, Yiping Ke
 Divergent Paths: Separating Homophilic and Heterophilic Learning for Enhanced Graph-level Representations.
 In *Proceedings of the 31st ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD'25)*.
- Yue Xun, **Jiaxing Xu**, Wenbo Gao, Chen Yang, Shujun Wang
 Ada-FCN: Adaptive Frequency-Coupled Network for fMRI-Based Brain Disorder Classification.
 In *Proceedings of the 28th International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI'25)*.
- Early Accept (Top 9%)**
- Qingtian Bian, **Jiaxing Xu**, Hui Fang, Yiping Ke
 CPMR: Context-Aware Incremental Sequential Recommendation with Pseudo-Multi-Task Learning.
 In *Proceedings of the 32nd ACM International Conference on Information and Knowledge Management (CIKM'23)*.
- Xinhang Li, Xiangyu Zhao, **Jiaxing Xu**, Yong Zhang[#], Chunxiao Xing
 IMF: Interactive Multimodal Fusion Model for Link Prediction.
 In *Proceedings of the ACM Web Conference (WWW'23)*.

TEACHING EXPERIENCE

School of Computer Science and Engineering, Nanyang Technological University	Singapore
Teaching Assistant of <i>Undergraduate Final Year Project</i>	Oct 2021 – Aug 2025
School of Software, Beihang University	Beijing, China
Teaching Assistant of <i>Practice of Programming</i>	Aug 2018 - Sep 2018

PROFESSIONAL EXPERIENCE

Automatic Drive Group, SenseTime Group Limited.	Beijing, China
Research Intern	Sep 2020 – Jan 2021
Knowledge Engineering Group (KEG), Tsinghua University	Beijing, China
Research Intern, advised by Jie Tang	Jun 2018 - Jun 2020
Knowledge Computing Group, Microsoft Research Asia (MSRA)	Beijing, China
Research Intern, advised by Börje Karlsson	Dec 2019 - Jun 2020
Big Data Mining Team, Microsoft Research Asia (MSRA)	Beijing, China
Research Intern, advised by Börje Karlsson	Mar 2019 - Jun 2019

ACADEMIC SERVICE

- Machine Learning Conference Referee:** ICML 2025, ICLR 2025-2025, NeurIPS 2024-2025, AISTATS 2025, LOG 2024
- Artificial Intelligence Conference Referee:** AAAI 2024-2025, IJCAI 2025, MM 2025, ECAI 2025
- Data Mining Conference Referee:** KDD 2025-2026, WWW 2025
- Medical Imaging Conference Referee:** MICCAI 2025, MICAD 2024
- Journal Referee:** Artificial Intelligence, TNNLS, Pattern Recognition, Neural Networks, Engineering Applications of Artificial Intelligence, Memetic Computing, Journal of Big Data

HONORS & AWARDS

PREMIA Best Student Paper Honourable Mention Award	2024
Software College Innovation and Entrepreneurship Scholarship	2018, 2019
Software College Excellent Student Leader Award	2017, 2019
Yuanhang Undergraduate Summer Overseas Research Scholarship	2019