LIANG YANG

EDUCATION	
 Ph.D. in Computer Sciences, University of Chinese Academy of Sciences (UCAS) Advisor: Xiaochun Cao Thesis: Semi-supervised Community Detection with Pairwise Prior Information 	2023 - 2016
 M.S. in Computational Mathematics, Nankai University (NKU) Advisor: Yuefan Deng 	2004 - 2007
 B.S. in Computational Mathematics, Nankai University (NKU) 	2000 - 2004
WORK EXPERIENCE	
 Professor in Hebei University of Technology The vice president of the School of Artificial Intelligence The deputy director of Hebei Province Key Laboratory of Big Data Calculation The member of the academic committee of the university 	2021 - present
 Associate Professor in Hebei University of Technology – School of Artificial Intelligence 	2018 - 2021
 Assistant Professor in Tianjin University of Commerce School of Information Engineering 	2010 - 2018
• R&D Engineer in Baidu	2009 - 2010
R&D Engineer in Tecent	2007 - 2009

RESEARCH INTERESTS

Multimodal Representation and Learning

- Social and Web Multimedia Analysis
- Graph Machine Learning and Tabular Learning

PROJECTS

- Research on Modeling and Representation Learning for Graph Data in Complex Scenarios. National Natural Science Foundation of China (NSFC) (62376088), 2024-2027. PI
- The Research on Large-scale Network Partition by Incorporating Heterogeneous Topology and Semantic Information. National Natural Science Foundation of China (NSFC) (61972442), 2020-2023. **PI**
- Research on Overlapping Community Detection and Model Selection with Actively Selected Heterogeneous Supervised Information. National Natural Science Foundation of China (NSFC) (61503281), 2016-2018. **PI**
- Hebei Yanzhao Golden Platform Talent Gathering Programme Core Talent Project (Education Platform). Key positions in science and technology. (HJZD202509), 2025-2027. **Pl**
- Research and Application of General Artificial Intelligence Based on Graph Machine Learning". Natural Science Foundation of Hebei Province (F2024202047), 2024-2026. **PI**

SELECTED PUBLICATIONS

- Liang Yang, Runjie Shi, Qiuliang Zhang, Bingxin Niu, Zhen Wang, Xiaochun Cao, Chuan Wang: Self-supervised Graph Neural Networks via Low-Rank Decomposition. *NeurIPS 2023*
- Liang Yang, Weixiao Hu, Jizhong Xu, Runjie Shi, Dongxiao He, Chuan Wang, Xiaochun Cao, Zhen Wang, Bingxin Niu, Yuanfang Guo: GAUSS: GrAph-customized Universal Self-Supervised Learning. *WWW 2024*

- Liang Yang, Lina Kang, Qiuliang Zhang, Mengzhe Li, Bingxin Niu, Dongxiao He, Zhen Wang, Chuan Wang, Xiaochun Cao, Yuanfang Guo: OPEN: Orthogonal Propagation with Ego-Network Modeling. *NeurIPS 2022*
- Liang Yang, Weihang Peng, Wenmiao Zhou, Bingxin Niu, Junhua Gu, Chuan Wang, Yuanfang Guo, Dongxiao He, Xiaochun Cao: Difference Residual Graph Neural Networks. *ACM Multimedia 2022*
- Liang Yang, Mengzhe Li, Liyang Liu, Bingxin Niu, Chuan Wang, Xiaochun Cao, Yuanfang Guo: Diverse Message Passing for Attribute with Heterophily. *NeurIPS 2021*
- Liang Yang, Jiayi Wang, Tingting Zhang, Dongxiao He, Chuan Wang, Yuanfang Guo, Xiaochun Cao, Bingxin Niu, Zhen Wang: Long Short-Term Graph Memory Against Class-imbalanced Over-smoothing. ACM Multimedia 2023
- Liang Yang, Yuexue Wang, Junhua Gu, Xiaochun Cao, Xiao Wang, Di Jin, Guiguang Ding, Jungong Han, Weixiong Zhang: Autonomous Semantic Community Detection via Adaptively Weighted Low-rank Approximation. ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM), 2019
- Di Jin, Cuiying Huo, Chundong Liang, Liang Yang *: Heterogeneous Graph Neural Network via Attribute Completion. *WWW 2021* (Best Paper Runner-up)
- Jiaming Zhuo, Feiyang Qin, Can Cui, Kun Fu, Bingxin Niu, Mengzhu Wang, Yuanfang Guo, Chuan Wang, Zhen Wang, Xiaochun Cao, Liang Yang*: Improving Graph Contrastive Learning via Adaptive Positive Sampling. CVPR 2024
- Jiaming Zhuo, Can Cui, Kun Fu, Bingxin Niu, Dongxiao He, Yuanfang Guo, Zhen Wang, Chuan Wang, Xiaochun Cao, Liang Yang*: Propagation is All You Need: A New Framework for Representation Learning and Classifier Training on Graphs. *ACM Multimedia 2023*
- Jiaming Zhuo, Yintong Lu, Hui Ning, Kun Fu, Bingxin Niu, Dongxiao He, Chuan Wang, Yuanfang Guo, Zhen Wang, Xiaochun Cao, Liang Yang*: Unified Graph Augmentations for Generalized Contrastive Learning on Graphs. NeurIPS 2024
- Dongxiao He, Chundong Liang, Cuiying Huo, Zhiyong Feng, Di Jin, Liang Yang*, Weixiong Zhang: Analyzing Heterogeneous Networks With Missing Attributes by Unsupervised Contrastive Learning. *IEEE TNNLS 2024*

AWARDS

- Tianjin Science and Technology Progress Award 2022 (Third-class Prize)
- Tianjin Science and Technology Progress Award 2024 (Third-class Prize)
- The 30th Web Conference (CCF A Ranking) Best Paper Runner-up

SERVICES

- Area Chair: ICML 2024 2025; ICLR 2025
- SPC: AAAI 2021 2025; IJCAI 2022 2025
- Member of Specialised Committee on the Granular Computing and Knowledge Discovery, CAAI
- Member of Specialised Committee on the Foundations of Artificial Intelligence, CAAI