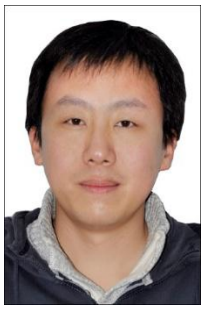
金弟导师简介



金弟，天津大学智算学部教授，博士生导师。一直从事图机器学习研究。在本领域顶级期刊或会议上发表论文 50 余篇，获 CCF A 类会议 WWW 2021 最佳论文奖亚军、国际数据挖掘顶会 ICDM 2021 最佳学生论文奖亚军、中国社会信息处理大会 SMP 2021 最佳论文奖、中国计算机教育大会 2022 最佳论文奖、《自动化学报》年度优秀论文奖，担任中科院一区 SCI 期刊 Information Sciences 副主编、Nature 旗下 SSCI 期刊 Humanities & Social Sciences Communications 副主编，CCF A 类会议 IJCAI 程序委员会 Board Member、IJCAI/AAAI 高级程序委员会成员 SPC。主持国家自然基金 3 项、国家重点研发计划子课题 2 项。获 ACM 中国天津新兴奖、中国商业联合会科技进步一等奖。

1. 研究方向：

图机器学习及其应用，包括网络表示学习、社团发现、图神经网络以及电商搜索推荐

2. 科研成果：

1、2018.1-2021.12，面向大规模、带内容复杂网络的精准语义社团发现研究，国家自然基金面上项目，项目负责人
2、2014.1-2016.12，结点—链接协同划分的复杂网络重叠社团发现方法研究，国家自然基金青年项目，项目负责人
3、2018.7-2021.6，社区风险精准防范云平台及示范应用，国家重点研发计划子课题，项目负责人
4、2014.1-2016.12，基于结点与链接统一模型的复杂网络重叠社团检测研究，教育部博士点基金新教师类，项目负责人
5、横向，知识图谱增强的图神经网络协同过滤建模，2022.1-2022.10，主持

3. 代表性论文：

2023:

[1] **Di Jin**, Luzhi Wang, Yizhen Zheng, Guojie Song, Fei Jiang, Xiang Li, Wei Lin and Shirui Pan, Dual Intent Enhanced Graph Neural Network for Session-based New Item Recommendation, *WWW*-23

[2] Zhizhi Yu, **Di Jin**, Cuiying Huo, Zhiqiang Wang, Xiulong Liu, Heng Qi, Jia Wu and Lingfei Wu, KGTrust: Evaluating Trustworthiness of SIoT via Knowledge Enhanced Graph Neural Networks, *WWW*-23

[3] **Di Jin**, Bingdao Feng, Siqi Guo, Xiaobao Wang, Jianguo Wei, Zhen Wang. Local-Global Defense Against Unsupervised Adversarial Attacks on Graphs, AAAI-23

[4] **Di Jin**, Jiayi Shi, Rui Wang, Yawen Li, Yuxiao Huang, Yu-Bin Yang. Trafformer: Unify Time and Space in Traffic, *AAAI-23*

[5] Cuiying Huo, **Di Jin**, Yawen Li, Dongxiao He, Yu-Bin Yang, Lingfei Wu. T2-GNN: Graph Neural Networks for Graphs with Incomplete Features and Structure via Teacher-Student Distillation,

AAAI-23

[6] Xiaobao Wang, Yiqi Dong, **Di Jin**, Yawen Li, Longbiao Wang, Jianwu Dang, Augmenting Affective Dependency Graph via Iterative Incongruity Graph Learning for Sarcasm Detection, *AAAI-23*

[7] Z Yu, **D Jin**, Z Liu, D He, X Wang, H Tong, J Han, Embedding text-rich graph neural networks with sequence and topical semantic structures, *Knowledge and Information Systems (KAIS)*, 2023, 65 (2), 613-640

2022:

[1] **Di Jin**, Rui Wang, Meng Ge, Dongxiao He, Xiang Li, Wei Lin, Weixiong Zhang, RAW-GNN: RAndom Walk Aggregation based Graph Neural Network, IJCAI-22, Long (3.75%)

[2] **Di Jin**, Luzhi Wang, YIZHEN ZHENG, Xiang Li, Fei Jiang, Wei Lin, Shirui Pan, CGMN: A Contrastive Graph Matching Network for Self-Supervised Graph Similarity Learning, IJCAI-22, Long (3.75%)

[3] **Di Jin**, Yingli Gong, Zhiqiang Wang, Zhizhi Yu, Dongxiao He, Yuxiao Huang and Wenjun Wang, Graph Neural Network for Higher-Order Dependency Networks, *The Web Conference (WWW-22)*, Oral

[4] Dongxiao He, Rui Guo, Xiaobao Wang, **Di Jin**, Yuxiao Huang and Wenjun Wang, Inflation Improves Graph Learning, *The Web Conference (WWW-22)*, Oral

[5] Tao Wang, **Di Jin**, Rui Wang, Dongxiao He, Yuxiao Huang, Powerful Graph Convolutioal Networks with Adaptive Propagation Mechanism for Homophily and Heterophily, *AAAI-22*, Oral

[6] Xin Sun, Xin Huang, and **Di Jin***, Fast Algorithms for Core Maximization on Large Graphs, PVLDB 2022

[7] **Di Jin**, Rui Wang, Tao Wang, Dongxiao He, Weiping Ding, Yuxiao Huang, Longbiao Wang, Witold Pedrycz, Amer: A New Attribute-Missing Network Embedding Approach, *IEEE Transactions on Cybernetics*, 2022

[8] 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 Transactions on Neural Networks and Learning Systems (TNNLS)*, 2022

[9] Z Yu, **D Jin**, Z Liu, D He, X Wang, H Tong, J Han. Embedding text-rich graph neural networks with sequence and topical semantic structures, *Knowledge and Information Systems*, 2022, 1-28

[10] **D Jin**, W Wang, G Song, SY Philip, J Han, Guest Editorial: Special Issue on Network Structural Modeling and Learning in Big Data, *IEEE Transactions on Big Data*, 2022, 8 (04), 867-868

[11] N Jiang, W Jie, J Li, X Liu, **D Jin**, GATrust: A Multi-Aspect Graph Attention Network Model for Trust Assessment in OSNs, *IEEE Transactions on Knowledge and Data Engineering*, 2022

[12] T Li, W Wang, P Jiao, Y Wang, R Ding, H Wu, L Pan, **D Jin**, Exploring Temporal Community Structure via Network Embedding, *IEEE Transactions on Cybernetics*, 2022

[13] X Su, S Xue, F Liu, J Wu, J Yang, C Zhou, W Hu, C Paris, S Nepal, **D Jin**, *et al*, A comprehensive survey on community detection with deep learning, *IEEE Transactions on Neural Networks and Learning Systems*, 2022

[14] W Lu, N Jiang, **D Jin**, H Chen, X Liu, Learning Distinct Relationship in Package Recommendation With Graph Attention Networks, *IEEE Transactions on Computational Social Systems*, 2022

[15] Na Li, **Di Jin**, Junhai Xu, Functional brain abnormalities in major depressive disorder using a multiscale community detection approach, *Neuroscience*, 2022

2021:

[1] **Di Jin**, Cuiying Huo, Chundong Liang, and Liang Yang, Heterogeneous Graph Neural Network via Attribute Completion. *The Web Conference (WWW-21)*, Oral, **Best Paper Award Runner-up (2/1736**)

[2] Zhizhi Yu, **Di Jin**, Ziyang Liu, Dongxiao He, Xiao Wang, Hanghang Tong, and Jiawei Han, AS-GCN: Adaptive Semantic Architecture of Graph Convolutional Networks for Text-Rich Networks, *ICDM-21*, Oral (**Best Student Paper Award Runner-up**)

[3] **Di Jin**, Zhizhi Yu, Cuiying Huo, Dongxiao He, Xiao Wang, and Jiawei Han, Universal Graph Convolutional Networks, *NeurIPS-21*

[4] **Di Jin**, Xiangchen Song, Zhizhi Yu, Ziyang Liu, Heling Zhang, Zhaomeng Cheng, and Jiawei Han, BiTe-GCN: A New GCN Architecture via Bidirectional Convolution of Topology and Features on Text-rich Networks, *WSDM-21*, Oral

[5] **Di Jin**, Zhizhi Yu, Pengfei Jiao, Shirui Pan, Dongxiao He, Jia Wu, Philip S. Yu, and Weixiong Zhang, A Survey of Community Detection Approaches: From Statistical Modeling to Deep Learning, *TKDE 2021*

[6] **Di Jin**, Zhizhi Yu, Dongxiao He, Carl Yang, Philip S. Yu, and Jiawei Han, GCN for HIN via Implicit Utilization of Attention and Meta-paths, *TKDE*, 2021

[7] **Di Jin**, Xiaobao Wang, Dongxiao He, Jianwu Dang, and Weixiong Zhang, Robust Detection of Link Communities with Summary Description in Social Networks, *TKDE*, 2021

[8] Xin Sun, Xin Huang, Zitan Sun, and **Di Jin***, Budget-constrained Truss Maximization over Large Graphs: A Component-based Approach, *CIKM-21*, Oral

[9] Dongxiao He, Shuai Li, **Di Jin**, Pengfei Jiao, Yuxiao Huang. Self-Guided Community Detection on Networks with Missing Edges. *IJCAI-21*, Oral

[10] Dongxiao He, Tao Wang, Lu Zhai, **Di Jin**, Liang Yang, Yuxiao Huang, Zhiyong Feng, Philip S. Yu, Adversarial Representation Mechanism Learning for Network Embedding, *TKDE*, 2021

[11] Pengfei Jiao, Qiang Tian, Wang Zhang, Xuan Guo, **Di Jin** and Huaming Wu. Role Discovery Guided Network Embedding based on Autoencoder and Attention Mechanism. *IEEE Transactions on Cybernetics*, 2021.

[12] Liang Yang, Yuanfang Guo, Junhua Gu, **Di Jin**, Bo Yang, Xiaochun Cao, Probabilistic Graph Convolutional Network via Topology-Constrained Latent Space Model, *IEEE Transactions on Cybernetics*, 2021

[13] Dongxiao He, Huixin Liu, Zhiyong Feng, Xiaobao Wang, **Di Jin**, Wenze Song, Yuxiao Huang, A Joint Community Detection Model: Integrating Directed and Undirected Probabilistic Graphical Models via Factor Graph with Attention Mechanism, *IEEE Transactions on Big Data (TBD)*, 2021

4. 在研项目：

1. 国家自然基金面上，面向富文本网络表征的鲁棒语义图神经网络新架构研究，2023.1-2026.12，主持

2. 计算机软件新技术国家重点实验室开放课题，面向大规模动态异构金融网络的图神经网络与可解释性推理， 2022.6-2024.5，主持

5. 联系方式：

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