

Jiawei Liu (刘佳玮)

Beijing, China | liu_jiawei@bupt.edu.cn
25 | Male



Research interests

Graph Machine Learning (14 papers), AI for EDA (6 papers)

Education

Beijing University of Posts and Telecommunications	Sep 2020
PhD student, Mentors: Jianwang Zhai, Chuan Shi	Beijing
Beijing University of Posts and Telecommunications	Aug 2016 - May 2020
Computer Science and Technology (Experimental Class), Bachelor	Beijing

Main Publications

WideGate: Beyond Directed Acyclic Graph Learning in Subcircuit Boundary Prediction.	Nov 2024
Jiawei Liu, Zhiyan Liu, Xun He, Jianwang Zhai, Zhengyuan Shi, Qiang Xu, Bei Yu, Chuan Shi. (DATE 2025)	
PolarGate: Breaking the Functionality Representation Bottleneck of And-Inverter Graph Neural Network	May 2024
Jiawei Liu, Jianwang Zhai, Mingyu Zhao, Zhe Lin, Bei Yu, Chuan Shi. (ICCAD 2024)	
Graph Neural Network based Time Estimator for SAT Solver	Aug 2024
Jiawei Liu, Wenyi Xiao, Hongtao Cheng, Chuan Shi. (International Journal of Machine Learning and Cybernetics 2024)	
PGAU: Static IR Drop Analysis for Power Grid using Attention U-Net Architecture and Label Distribution Smoothing.	Mar 2024
Feng Guo*, Jiawei Liu*, Jianwang Zhai, Jingyu Jia, Kang Zhao, Chuan Shi. (GLSVLSI 2024)	
SATGL: an Open-source Graph Learning Toolkit for Boolean Satisfiability	Mar 2024
Hongtao Cheng*, Jiawei Liu*, Jianwang Zhai, Mingyu Zhao, Cheng Yang, Chuan Shi. (ISED 2024)	
Towards graph foundation models: A survey and beyond	Oct 2023
Jiawei Liu, Cheng Yang, Zhiyuan Lu, Junze Chen, Yibo Li, Mengmei Zhang, Ting Bai, Yuan Fang, Lichao Sun, Philip S. Yu, Chuan Shi. (In submission, arXiv available)	

Honors & Awards

The first prize of Integrated Circuit EDA Elite Challenge 2023 (Top 3/80, Track 6)	Dec 2023
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Beijing Outstanding Graduate	Jun 2020
National second prize of China Undergraduate Mathematical Contest in Modeling	Oct 2018

Other Publications

IR-Fusion: A Fusion Framework for Static IR Drop Analysis Combining Mathematical Solutions and Machine Learning	Nov 2024
Feng Guo, Jianwang Zhai, Jingyu Jia, Jiawei Liu , Kang Zhao, Bei Yu, Chuan Shi. (DATE 2025)	
Graph Foundation Model.	May 2024
Chuan Shi, Junze Chen, Jiawei Liu , Cheng Yang. (Frontiers Of Computer Science)	
Heterogeneous Spatio-temporal Graph Contrastive Learning for Point-of-Interest Recommendation	Mar 2024
Jiawei Liu , Haihan Gao, Cheng Yang, Chuan Shi, Tianchi Yang, Hongtao Cheng, Qianlong Xie, Xingxing Wang, Dong Wang. (Tsinghua Science and Technology)	
Endowing Pre-trained Graph Models with Provable Fairness.	Feb 2024
Zhongjian Zhang, Mengmei Zhang, Yue Yu, Cheng Yang, Jiawei Liu , Chuan Shi. (WWW 2024, CCF-A)	
Self-Supervised Spatio-Temporal Graph Learning for Point-of-Interest Recommendation	Aug 2023
Jiawei Liu , Haihan Gao, Chuan Shi, Hongtao Cheng, Qianlong Xie. (Applied Sciences)	
Abnormal Event Detection via Hypergraph Contrastive Learning	Dec 2022
Bo Yan, Cheng Yang, Chuan Shi, Jiawei Liu , Xiaochen Wang. (SDM 2023, CCF-B)	
Learning to Distill Graph Neural Networks.	Oct 2022
Cheng Yang, Yuxin Guo, Yao Xu, Chuan Shi, Jiawei Liu , Chunchen Wang, Xin Li, Ning Guo, Hongzhi Yin. (WSDM 2023, CCF-B)	
A survey on heterogeneous information network based recommender systems: Concepts, methods, applications and resources.	Jun 2022
Jiawei Liu , Chuan Shi, Cheng Yang, Zhiyuan Lu, Philip S.Yu. (AI Open)	
Heterogeneous Information Network based Recommender Systems: a survey (in Chinese)	Oct 2021
Jiawei Liu , Chuan Shi, Cheng Yang, Philip S. Yu. (Journal of Cyber Security)	
Extract the Knowledge of Graph Neural Networks and Go Beyond it: An Effective Knowledge Distillation Framework	Apr 2021
Cheng Yang, Jiawei Liu , Chuan Shi. (WWW2021, CCF-A)	
Decorrelated Clustering with Data Selection Bias	Apr 2020
Xiao Wang, Shaohua Fan, Kun Kuang, Chuan Shi, Jiawei Liu , Bai Wang. (IJCAI 2020, CCF-A)	