

张震

# ZHEN ZHANG

Computing 1, Computing Drive, NUS, Singapore 117417

Email: zhen@nus.edu.sg

## RESEARCH INTEREST

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**Data Mining, Machine Learning, Graph Neural Networks, etc.**

## EDUCATION

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**National University of Singapore**

*September 2021 - Present*

- Research Fellow
- Advisor: Prof. Bingsheng He

**Zhejiang University**

*September 2015 - June 2021*

- Ph.D., Computer Science
- Advisor: Prof. Jiajun Bu

**Qingdao University**

*September 2011 - June 2015*

- Bachelor, Information Engineering
- Top 2% among 300+ students

## EXPERIENCE

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**Research Intern, Alibaba Group**

*December 2019 - July 2021*

- Designed graph neural network based graph matching algorithms for fraud detection.

**Research Intern, Alibaba Group**

*April 2017 - July 2018*

- Designed fraud detection algorithms for e-commerce platforms of Taobao.
- Designed representation learning algorithms for device identifications.

## PUBLICATIONS

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[17] **Zhen Zhang**, Meihan Liu, Anhui Wang, Hongyang Chen, Zhao Li, Jiajun Bu, Bingsheng He. Collaborate to Adapt: Source-Free Graph Domain Adaptation via Bi-directional Adaptation. In Proceedings of The Web Conference 2024 (WWW 2024).

[16] Qian Wang, **Zhen Zhang**, Zemin Liu, Shengliang Lu, Bingqiao Luo, Bingsheng He. ETGraph: A Pioneering Dataset Bridging Ethereum and Twitter. In Proceedings of the Twelfth International Conference on Learning Representations (ICLR 2024).

[15] Meihan Liu, Zeyu Fang, **Zhen Zhang**, Ming Gu, Sheng Zhou, Xin Wang, Jiajun Bu. Rethinking Propagation for Unsupervised Graph Domain Adaptation. In Proceedings of the 38th Annual AAAI Conference on Artificial Intelligence (AAAI 2024).

- [14] **Zhen Zhang**, Bingqiao Luo, Shengliang Lu, Bingsheng He. Live Graph Lab: Towards Open, Dynamic and Real Transaction Graphs with NFT. In Proceedings of the Thirty-seventh Annual Conference on Neural Information Processing Systems (NeurIPS 2023, Datasets and Benchmarks Track).
- [13] Johan Kok Zhi Kang, Sien Yi Tan, Bingsheng He, **Zhen Zhang**. Real Time Index and Search Across Large Quantities of GNN Experts for Low Latency Online Learning. In Proceedings of the 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2023).
- [12] Sihao Hu, **Zhen Zhang**, Bingqiao Luo, Shengliang Lu, Bingsheng He, Ling Liu. BERT4ETH: A Pre-trained Transformer for Ethereum Fraud Detection. In Proceedings of The Web Conference 2023 (WWW 2023).
- [11] Sihao Hu, **Zhen Zhang**, Shengliang Lu, Bingsheng He, Zhao Li. Sequence-Based Target Coin Prediction for Cryptocurrency Pump-and-Dump. In Proceedings of the 2023 International Conference on Management of Data (SIGMOD 2023).
- [10] Ning Ma, Hongyi Zhang, Xuhui Li, Sheng Zhou, **Zhen Zhang**, Jun Wen, Haifeng Li, Jingjun Gu, Jiajun Bu. Learning Spatial-Preserved Skeleton Representation for Few-Shot Action Recognition. In Proceedings of the 17th European Conference on Computer Vision (ECCV 2022).
- [9] Ning Ma, Jiajun Bu, Lixian Lu, Jun Wen, Sheng Zhou, **Zhen Zhang**, Jingjun Gu, Haifeng Li, Xifeng Yan. Context-Guided Entropy Minimization for Semi-Supervised Domain Adaptation. Elsevier Neural Networks[J] (Neural Networks, 2022).
- [8] Chunbin Gu, Jiajun Bu, **Zhen Zhang**, Zhi Yu, Dongfang Ma, Wei Wang. Image Search with Text Feedback by Deep Hierarchical Attention Mutual Information Maximization. In Proceedings of the 29th ACM International Conference on Multimedia (MM 2021).
- [7] **Zhen Zhang**, Jiajun Bu, Martin Ester, Jianfeng Zhang, Zhao Li, Chengwei Yao, Huifen Dai, Zhi Yu, Can Wang. Hierarchical Multi-View Graph Pooling with Structure Learning. IEEE Transactions on Knowledge and Data Engineering[J] (TKDE 2021).
- [6] **Zhen Zhang**, Jiajun Bu, Martin Ester, Zhao Li, Chengwei Yao, Zhi Yu, Can Wang. H<sup>2</sup>MN: Graph Similarity Learning with Hierarchical Hypergraph Matching Networks. In Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2021).
- [5] **Zhen Zhang**, Jiajun Bu, Zhao Li, Chengwei Yao, Can Wang, Jia Wu. TigeCMN: On Exploration of Temporal Interaction Graph Embedding via Coupled Memory Neural Networks. Elsevier Neural Networks[J] (Neural Networks, 2021).
- [4] Ning Ma, Jiajun Bu, Jieyu Yang, **Zhen Zhang**, Chengwei Yao, Zhi Yu, Sheng Zhou, Xifeng Yan. Adaptive-Step Graph Meta-Learner for Few-Shot Graph Classification. In Proceedings of 29th ACM International Conference on Information and Knowledge Management (CIKM 2020).
- [3] **Zhen Zhang**, Jiajun Bu, Martin Ester, Jianfeng Zhang, Chengwei Yao, Zhao Li, Can Wang. Learning Temporal Interaction Graph Embedding via Coupled Memory Networks. In Proceedings of The Web Conference 2020 (WWW 2020).
- [2] Sheng Zhou, Jiajun Bu, **Zhen Zhang**, Can Wang, Lingzhou Ma, Jianfeng Zhang. Cross Multi-Type Objects Clustering in Attributed Heterogeneous Information Network. Elsevier Knowledge-Based Systems[J] (KBS 2020).
- [1] **Zhen Zhang**, Hongxia Yang, Jiajun Bu, Sheng Zhou, Pinggang Yu, Jianwei Zhang, Martin Ester, Can Wang. ANRL: Attributed Network Representation Learning via Deep Neural Networks. In Proceedings of the Twenty-Seventh International Joint Conference on Artificial Intelligence (IJCAI 2018).

## ACADEMIC ACTIVITIES

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### Conference reviewer

Program Committee Member of ICML  
Program Committee Member of ICLR  
Program Committee Member of NeurIPS  
Program Committee Member of KDD  
Program Committee Member of WWW  
Program Committee Member of AAAI  
Program Committee Member of CVPR  
Program Committee Member of ICCV  
Program Committee Member of ECCV  
Program Committee Member of CIKM  
Program Committee Member of SDM

### Journal reviewer

Invited Reviewer for IEEE Transactions on Knowledge and Data Engineering (TKDE)  
Invited Reviewer for ACM Transactions on Information Systems (TOIS)  
Invited Reviewer for ACM Computing Surveys  
Invited Reviewer for ACM Transactions on Intelligent Systems and Technology (TIST)  
Invited Reviewer for IEEE Transactions on Neural Networks and Learning Systems (TNNLS)  
Invited Reviewer for Neurocomputing  
Invited Reviewer for Neural Networks  
Invited Reviewer for Information Science  
Invited Reviewer for Computers & Security  
Invited Reviewer for ACM Transactions on the Web

## HONORS & AWARDS

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Outstanding Doctoral Thesis of Zhejiang University  
Nominated for Outstanding Doctoral Thesis in Zhejiang Province