

ZHEN ZHANG

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RESEARCH INTEREST

Graph Embedding (a.k.a Network Representation Learning), Graph Neural Network Personalized Recommendation

EDUCATION

School of Computing, National University of Singapore

September 2021 - Present

- Research Fellow
- Advisor: Dr. Bingsheng He

College of Computer Science, Zhejiang University

September 2015 - June 2021

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

College of Computer Science, Qingdao University

September 2011 - June 2015

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

EXPERIENCE

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

- [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. H²MN: 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).

SKILLS

Familiar with Data Mining and Machine Learning methodologies.

Familiar with machine learning libraries such as TensorFlow, PyTorch, Scikit-Learn, etc.

Familiar with writing code using Python, C/C++ and Matlab to handle practical problems.

HONORS & AWARDS

Excellent Graduate Student Award, Zhejiang University, 2016-2018

Outstanding Undergraduate Award, Qingdao University, 2015

Excellent Undergraduate Student Award, Qingdao University, 2012-2015

Dean Scholarship, Qingdao University, 2013

PROFESSIONAL SERVICE

Journal Reviewer:

IEEE Transactions on Knowledge and Data Engineering (TKDE)

Elsevier Neurocomputing

Elsevier Neural Netwroks

ACM Computing Surveys

Conference Reviewer:

AAAI-2021, 2022