Zemin Liu

PHOTOGRAPH



CONTACT INFORMATION $Google\ Scholar:\ https://scholar.google.com/citations?user=IxHO1nkAAAAJ$

Github: https://github.com/shuaiOKshuai

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RESEARCH INTERESTS I'm interested in the research of graph representation learning, including graph embedding, graph neural networks, and heterogeneous information networks. In particular, I mainly focus on investigating the novel research problems such as meta-learning, few-shot learning, and imbalanced learning on graphs.

EDUCATIONS

Visiting Scholar & Research Engineer November 2016 - September 2017 Advanced Digital Sciences Center (ADSC), Singapore

Advisor: Dr. Vincent W. Zheng¹

Ph.D. in Computer Science September 2012 - September 2018 College of Computer Science and Technology, Zhejiang University, P.R.China.

Advisor: Prof. Jing Ying

Bachelor in Software Engineering September 2008 - June 2012 School of Software, Shandong University, P.R.China.

PROFESSIONAL Research Scientist

April 2019 - Present

EXPERIENCE

School of Computing and Information Systems, Singapore Management University, Singapore.

 $W\!ork$ with: Assistant Prof. Yuan Fang^2 and Prof. Steven C.H. Hoi^3

I'm responsible for conducting research in the field of graph representation learning, meta-learning and imbalanced learning, and contributing papers to top-tier conferences and journals.

ACADEMIC SERVICES Program Committee Member or Reviewer for Conferences:

2019: ASONAM (subreviewer), AAAI (subreviewer), CIKM (subreviewer).

2020: ACML, EMNLP, IJCAI, NeurIPS, PAKDD.

¹http://vincentz.cc/

²https://www.yfang.site/

³https://sites.google.com/view/stevenhoi/home

2021: AAAI, ACL, ICML, IJCAI (Senior PC), NeurIPS, PAKDD, ACML, EMNLP,

NAACL-HLT. **2022**: ICLR.

Reviewer for Journals:

2018: TKDE (IEEE Transactions on Knowledge and Data Engineering).

2020: FCS (Frontiers of Computer Science), IPM (Information Processing and

Management).

2021: FCS, Machine Learning.

SELECTED

Zemin Liu, Vincent W. Zheng, Zhou Zhao, Fanwei Zhu, Kevin Chen-Chuan PUBLICATIONS Chang, Minghui Wu, Jing Ying. Semantic Proximity Search on Heterogeneous Graph by Proximity Embedding, The 31st AAAI Conference on Artificial Intelligence (AAAI'17), full paper.

> Jia Wang, Vincent W. Zheng, **Zemin Liu**, and Kevin C.-C. Chang. Topological Recurrent Neural Network for Diffusion Prediction, IEEE International Conference on Data Mining 2017 (*ICDM'17*), full paper.

> Zemin Liu, Vincent W. Zheng, Zhou Zhao, Fanwei Zhu, Kevin Chen-Chuan Chang, Minghui Wu, Jing Ying. Distance-aware DAG Embedding for Proximity Search on Heterogeneous Graphs, The 32nd AAAI Conference on Artificial Intelligence (AAAI'18), full paper.

Zemin Liu, Vincent W. Zheng, Zhou Zhao, Hongxia Yang, Kevin C.-C. Chang, Minghui Wu and Jing Ying. Subgraph-augmented Path Embedding for Semantic User Search on Heterogeneous Social Network, The Web Conference 2018 (WWW'18), full paper.

Zemin Liu, Vincent W. Zheng, Zhou Zhao, Zhao Li, Hongxia Yang, Minghui Wu and Jing Ying. Interactive Paths Embedding for Semantic Proximity Search on Heterogeneous Graphs, The 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD'18), Research Track, full paper.

Wentao Zhang, Yuan Fang, **Zemin Liu**, Min Wu, Xinming Zhang. mg2vec: Learning Relationship-Preserving Heterogeneous Graph Representations via Metagraph Embedding, IEEE Transactions on Knowledge and Data Engineering 2020 (TKDE), full paper.

Zemin Liu*, Wentao Zhang*, Yuan Fang, Xinming Zhang, Steven CH Hoi. Towards Locality-Aware Meta-Learning of Tail Node Embeddings on Networks, The 29th ACM International Conference on Information and Knowledge Management (CIKM'20), full paper. (* denotes co-first authors with equal contribution)

Zemin Liu, Yuan Fang, Chenghao Liu, Steven CH Hoi. Relative and Absolute Location Embedding for Few-Shot Node Classification on Graph, The 35th AAAI Conference on Artificial Intelligence (AAAI'21), full paper.

Zemin Liu, Yuan Fang, Yong Liu, Vincent W. Zheng. Neighbor-Anchoring Adversarial Graph Neural Networks, IEEE Transactions on Knowledge and Data Engineering 2021 (TKDE), full paper.

Zhihao Wen, Yuan Fang, **Zemin Liu**. Meta-Inductive Node Classification across Graphs, The 44th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR'21), full paper.

Zemin Liu, Yuan Fang, Chenghao Liu, Steven CH Hoi. *Node-wise Localization of Graph Neural Networks*, The 30th International Joint Conference on Artificial Intelligence (*IJCAI'21*), full paper.

Zemin Liu, Trung-Kien Nguyen, Yuan Fang. *Tail-GNN: Tail-Node Graph Neural Networks*, The 27th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD'21*), Research Track, full paper.

Ph.D THESIS

Semantic Proximity Search on Heterogeneous Graphs by Embedding Methods. June 2018

SELECTED AWARDS

Outstanding Ph.D Candidate Scholarship, College of Computer Science and Technology, Zhejiang University 2016

Outstanding Graduate Leader Award, Zhejiang University

2016

Outstanding Postgraduates Graduated Scholarship, College of Computer Science and Technology, Zhejiang University 2017

"Tianzhou Chen Fund" Scholarship, College of Computer Science and Technology, Zhejiang University 2018