YIWEI WANG

Phone: +1 4256255851 \leq Email: wangyw.evan@gmail.com \leq Website: https://wangywust.github.io/

WORK

Assistant Professor at University of California, Merced

Research and teaching on large language models and graph learning.

Postdoc at University of California, Los Angeles

In the UCLA NLP group, advised by Prof. Kai-Wei Chang and Prof. Nanyun Peng.

Applied Scientist in Amazon

Sep. 2022 - Sep. 2023

EDUCATION

Doctor of Philosophy in Computer Science
National University of Singapore

Master of Philosophy in Electronic and Computer Engineering
Hong Kong University of Science and Technology

Bachelor of Science in Information Engineering
Southeast University, GPA: 3.92/4.0, Rank: 5/218 (Top 3%)

Jul. 2019 - Mar. 2023

Aug. 2017 - Jun. 2019

Aug. 2013 - Jun. 2017

RESEARCH PUBLICATION

- [1] Yihong Luo, Yuhan Chen, Siya Qiu, Yiwei Wang, Chen Zhang, Yan Zhou, Xiaochun Cao, Jing Tang. Fast Graph Sharpness-Aware Minimization for Enhancing and Accelerating Few-Shot Node Classification, *NeurIPS 2024*.
- [2] Baolong Bi, Shenghua Liu, Yiwei Wang, Lingrui Mei, Hongcheng Gao, Yilong Xu, Xueqi Cheng. Adaptive Token Biaser: Knowledge Editing via Biasing Key Entities, *EMNLP 2024*.
- [3] Bingxuan Li, Yiwei Wang, Tao Meng, Nanyun Peng, Kai-Wei Chang. Controllable Generation of Black-Box Large Language Models via Divide-and-Conquer, *EMNLP 2024*.
- [4] Lingrui Mei, Shenghua Liu, Yiwei Wang, Baolong Bi, Xueqi Chen. SLANG: New Concept Comprehension of Large Language Models, *EMNLP 2024*.
- [5] Zhicheng Yang, Yinya Huang, Jing Xiong, Liang Feng, Xiaodan Liang, Yiwei Wang, Jing Tang. AlignedCoT: Prompting Large Language Models via Native-Speaking Demonstrations, *EMNLP 2024*.
- [6] Silin Meng, Yiwei Wang, Cheng-Fu Yang, Nanyun Peng, Kai-Wei Chang. LLM-A*: Large Language Model Enhanced Incremental Heuristic Search on Path Planning, EMNLP 2024.
- [7] Baolong Bi, Shenghua Liu, Yiwei Wang, Lingrui Mei, Xueqi Cheng. Lpnl: Scalable link prediction with large language models, *ACL 2024*.
- [8] Juncheng Liu, Bryan Hooi, Kenji Kawaguchi, Yiwei Wang, Chaosheng Dong, Xiaokui Xiao. Scalable and Effective Implicit Graph Neural Networks on Large Graphs, *ICLR* 2024.
- [9] Yiwei Wang, Muhao Chen, Nanyun Peng, Kai-Wei Chang. Frustratingly Easy Jailbreak of Large Language Models via Output Prefix Attacks, 2024.

- [10] Fei Wang, Wenjie Mo, Yiwei Wang, Wenxuan Zhou, Muhao Chen. A Causal View of Entity Bias in (Large) Language Models, *EMNLP 2023*.
- [11] Yiwei Wang, Yujun Cai, Muhao Chen, Yuxuan Liang, Bryan Hooi. Primacy Effect of ChatGPT, EMNLP 2023.
- [12] Yuxuan Liang, Yutong Xia, Songyu Ke, Yiwei Wang, Qingsong Wen, Junbo Zhang, Yu Zheng, Roger Zimmermann. Airformer: Predicting nationwide air quality in china with transformers, AAAI 2023.
- [13] Yiwei Wang, Bryan Hooi, Fei Wang, Yujun Cai, Yuxuan Liang, Wenxuan Zhou, Jing Tang, Manjuan Duan, Muhao Chen. How Fragile is Relation Extraction under Entity Replacements?, CONLL 2023.
- [14] Yiwei Wang, Bryan Hooi, Yozen Liu, Neil Shah. Graph explicit neural networks: Explicitly encoding graphs for efficient and accurate inference, WSDM 2023.
- [15] Juncheng Liu, Zequn Sun, Bryan Hooi, Yiwei Wang, Dayiheng Liu, Baosong Yang, Xiaokui Xiao, Muhao Chen. Dangling-Aware Entity Alignment with Mixed High-Order Proximities, ACL 2022.
- [16] Yiwei Wang, Muhao Chen, Wenxuan Zhou, Yujun Cai, Yuxuan Liang, Bryan Hooi. GraphCache: Message Passing as Caching for Sentence-Level Relation Extraction, ACL 2022.
- [17] Yiwei Wang, Muhao Chen, Wenxuan Zhou, Yujun Cai, Yuxuan Liang, Dayiheng Liu, Baosong Yang, Juncheng Liu, Bryan Hooi. Should We Rely on Entity Mentions for Relation Extraction? Debiasing Relation Extraction with Counterfactual Analysis, *ACL* 2022.
- [18] Juncheng Liu, Yiwei Wang, Bryan Hooi, Renchi Yang, Xiaokui Xiao. Lscale: latent space clustering-based active learning for node classification, ECML 2022.
- [19] Yiwei Wang, Bryan Hooi, Yozen Liu, Tong Zhao, Zhichun Guo, Neil Shah. Flashlight: Scalable link prediction with effective decoders, *LOG 2022*.
- [20] Yuxuan Liang, Kun Ouyang, Yiwei Wang, Zheyi Pan, Yifang Yin, Hongyang Chen, Junbo Zhang, Yu Zheng, David S Rosenblum, Roger Zimmermann. Mixed-order relation-aware recurrent neural networks for spatio-temporal forecasting, *TKDE 2022*.
- [21] Juncheng Liu, Kenji Kawaguchi, Bryan Hooi, Yiwei Wang, Xiaokui Xiao. Eignn: Efficient infinite-depth graph neural networks, *NeurIPS 2021*.
- [22] Yiwei Wang, Yujun Cai, Yuxuan Liang, Henghui Ding, Changhu Wang, Siddharth Bhatia, Bryan Hooi. Adaptive data augmentation on temporal graphs, *NeurIPS 2021*.
- [23] Yujun Cai, Yiwei Wang, Yiheng Zhu, Tat-Jen Cham, Jianfei Cai, Junsong Yuan, Jun Liu, Chuanxia Zheng, Sijie Yan, Henghui Ding, others. A unified 3d human motion synthesis model via conditional variational auto-encoder, *ICCV 2021*.
- [24] Yuxuan Liang, Kun Ouyang, Yiwei Wang, Ye Liu, Junbo Zhang, Yu Zheng, David S Rosenblum. Revisiting convolutional neural networks for citywide crowd flow analytics, *ECML 2021*.
- [25] Yiwei Wang, Wei Wang, Yuxuan Liang, Yujun Cai, Bryan Hooi. Progressive supervision for node classification, ECML 2021.
- [26] Yuxuan Liang, Kun Ouyang, Hanshu Yan, Yiwei Wang, Zekun Tong, Roger Zimmermann. Modeling Trajectories with Neural Ordinary Differential Equations, *IJCAI 2021*.

- [27] Yuxuan Liang, Kun Ouyang, Junkai Sun, Yiwei Wang, Junbo Zhang, Yu Zheng, David Rosenblum, Roger Zimmermann. Fine-grained urban flow prediction, WWW 2021.
- [28] Yiwei Wang, Wei Wang, Yuxuan Liang, Yujun Cai, Bryan Hooi. Curgraph: Curriculum learning for graph classification, WWW 2021.
- [29] Yiwei Wang, Wei Wang, Yuxuan Liang, Yujun Cai, Bryan Hooi. Mixup for node and graph classification, WWW 2021.
- [30] Yuxuan Liang, Kun Ouyang, Yiwei Wang, David Samuel Rosenblum. Revisiting convolutional neural networks for urban flow analytics, 2020.
- [31] Yujun Cai, Lin Huang, Yiwei Wang, Tat-Jen Cham, Jianfei Cai, Junsong Yuan, Jun Liu, Xu Yang, Yiheng Zhu, Xiaohui Shen, others. Learning progressive joint propagation for human motion prediction, *ECCV* 2020.
- [32] Yiwei Wang, Shenghua Liu, Minji Yoon, Hemank Lamba, Wei Wang, Christos Faloutsos, Bryan Hooi. Provably robust node classification via low-pass message passing, *ICDM 2020*.
- [33] Yiwei Wang, Wei Wang, Yujun Ca, Bryan Hooi, Beng Chin Ooi. Detecting implementation bugs in graph convolutional network based node classifiers, *ISSRE 2020*.
- [34] Yiwei Wang, Wei Wang, Yuxuan Liang, Yujun Cai, Juncheng Liu, Bryan Hooi. NodeAug: Semi-supervised node classification with data augmentation, KDD 2020.
- [35] Licheng Zhao, Yiwei Wang, Sandeep Kumar, Daniel P Palomar. Optimization algorithms for graph Laplacian estimation via ADMM and MM, TSP 2019.
- [36] Yiwei Wang, Mark James Carman, Yuan-Fang Li. Using knowledge graphs to explain entity co-occurrence in Twitter, CIKM 2017.

HONORS AND AWARDS

Dean's Graduate Research Excellence Award (Highest honor of PhD students at NUS with 3 to 4 recipients per year) Jul. 2022

SDSC Dissertation Research Fellowship (10 annual quotas for Singapore-based Ph.D. Students) Mar. 2021

Research Achievement Award from School of Computing of National University of Singapore Sep. 2020

Meritorious Winner of the Interdisciplinary Contest in Modeling (ICM) held by COMAP (7%) Apr. 2016

National Scholarship from Ministry of Education of the People's Republic of China (3%) Oct. 2015

TEACHING

| Teaching Assistant, Big Data Systems for Data Science | National University of Singapore, 2021 |
|---|--|
| Teaching Assistant, Big Data Systems for Data Science | National University of Singapore, 2021 |
| Teaching Assistant, Programming Methodology | National University of Singapore, 2021 |

Teaching Assistant, Knowledge Discovery and Data Mining and 2021

National University of Singapore, 2020

Teaching Assistant, Parallel Computing

National University of Singapore, 2020

Teaching Assistant, Signal Processing and Communications

HKUST, 2018

SERVICE AS REVIEWER

- Conference on Empirical Methods in Natural Language Processing (EMNLP) 2023, 2024
- Annual Meeting of the Association for Computational Linguistics (ACL) 2023, 2024
- Learning on Graphs Conference (LOG) 2022, 2023, 2024
- The Web Conference (WWW) 2023, 2024
- International Conference on Learning Representations (ICLR) 2023, 2024 (Area Chair)
- Conference on Neural Information Processing Systems (NeurIPS) 2022, 2023, 2024
- The AAAI Conference on Artificial Intelligence (AAAI) 2021, 2022, 2023, 2024
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2021, 2022, 2023, 2024
- International Conference on Computer Vision (ICCV) 2021, 2022, 2023, 2024
- European Conference on Computer Vision (ECCV) 2022, 2023, 2024
- International Joint Conference on Artificial Intelligence (IJCAI-ECAI) 2022, 2023, 2024
- IEEE International Conference on Multimedia and Expo (ICME) 2022, 2023, 2024
- European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD) 2020
- International Joint Conference on Neural Network (IJCNN) 2022
- Neurocomputing
- Pattern Recognition
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- IET Image Processing
- IEEE Transactions on Big Data
- Computer Science Review
- Cybernetics and Systems
- Transactions on Systems, Man and Cybernetics: Systems

ABILITIES AND SKILLS

Languages: Chinese, English (IELTS: 8.0).

 $\textbf{Programming} \hbox{: Advanced with MATLAB, Python. Familiar with $C/C++$, JAVA}.$