Heng Wang

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Homepage: arthur-heng.github.io

Research Interests

I am interested in natural language reasoning and how to use language to interact with the physical world and humans.

Education

Xi'an Jiaotong University, Xi'an, Shaanxi, China (member of the C9 league in China) 2021.09 - present Computer Science and Technology Experimental Class (Qian Xuesen Honor Science)

GPA: 94.96/100 (4.17/4.3) [transcript] Thesis Advisor: Prof. Minnan Luo

Publications (* indicates equal contribution)

[1] Can Language Models Solve Graph Problems in Natural Language?

Heng Wang*, Shangbin Feng*, Tianxing He, Zhaoxuan Tan, Xiaochuang Han, Yulia Tsvetkov.

In Proceedings of the NeurIPS 2023 (spotlight)

[2] Detecting Spoilers in Movie Reviews with External Movie Knowledge and User Networks

Heng Wang, Wenqian Zhang, Yuyang Bai, Zhaoxuan Tan, Shangbin Feng, Qinghua Zheng, Minnan Luo. In *Proceedings of EMNLP 2023*

[3] TwiBot-22: Towards Graph-Based Twitter Bot Detection

Shangbin Feng*, Zhaoxuan Tan*, Herun Wan*, Ningnan Wang*, Zilong Chen*, Binchi Zhang*, Qinghua Zheng, Wenqian Zhang, Zhenyu Lei, Shujie Yang, Xinshun Feng, Qingyue Zhang, Hongrui Wang, Yuhan Liu, Yuyang Bai, Heng Wang, Zijian Cai, Yanbo Wang, Lijing Zheng, Zihan Ma, Jundong Li, Minnan Luo. In *Proceedings of the NeurIPS, Datasets and Benchmarks Track, 2022*

[4] **BotMoE: Twitter Bot Detection with Community-Aware Mixtures of Modal-Specific Experts** Yuhan Liu, Zhaoxuan Tan, <u>Heng Wang</u>, Shangbin Feng, Qinghua Zheng, Minnan Luo. In *Proceedings of SIGIR 2023*

[5] Resolving Knowledge Conflicts in Large Language Models

Yike Wang*, Shangbin Feng*, <u>Heng Wang</u>, Weijia Shi, Vidhisha Balachandran, Tianxing He, Yulia Tsvetkov. arXiv preprint 2023

Honors and Awards

| SenseTime Scholarship (awarded to 30 students in China) | 2023 |
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| Golden Award (team 3rd place), ACM ICPC Shaanxi Provincial Programming Contest | 2023 |
| Silver Award (ranking $26/115$), ACM ICPC Asia Hong Kong Regional | 2023 |
| National Scholarship | 2022 |
| NeurIPS Scholar Award | 2023 |
| Academic Research Award, Xi'an Jiaotong University | 2022 |
| Silver Award, CCF Collegiate Computer System and Programming Contest | 2022 |
| Silver Award (ranking $61/697$), ACM ICPC Asia Kunming Regional | 2022 |
| Outstanding Student Leaders, Xi'an Jiaotong University | 2022 |
| Dean's List, Xi'an Jiaotong University | 2022 |

Research Experience

Research Assistant, Luo lab Undergraduate Division (LUD) @ Xi'an Jiaotong University

- Member: Worked on graph-based Twitter bot detection, heterogeneous graph anomaly detection, and graph neural networks pre-training.
 2022.02 - present
- Published a paper as the first author: "Detecting Spoilers in Movie Reviews with External Movie Knowledge and User Networks" at EMNLP 2023.

Advisor: Prof. Minnan Luo

Research Assistant, TsvetShop @ University of Washington

2023.02 - 2023.06

- Working on probing the graph reasoning abilities of large language models.
- Published a paper as the first author: "Can Language Models Solve Graph Problems in Natural Language?" at NeurIPS 2023 (spotlight).

Advisor: Ph.D. student Shangbin Feng, Prof. Yulia Tsvetkov

Research Assistant, @ University of California, Berkeley

2023.07 - present

• Working on AI agent safety

Advisor: Ph.D. student Ruiqi Zhong, Prof. Jacob Steinhardt

Services

| Virtual Volunteer for EMNLP | 2023 |
|---|------------|
| Reviewer for EMNLP | 2023 |
| Reviewer for TOIS | 2023 |
| Reviewer for NeurIPS, Datasets and Benchmarks Track | 2022, 2023 |

Skills

- Programming Skills: C/C++, Python, PyTorch, Pascal
- Language Skills: Mandarin (native), English (TOFEL 106: R 30, L 29, S 23, W 24)