Hanmeng Liu, Ph.D.

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9UAAAAJ ⯁ https://github.com/liuhanmeng Google Scholar Citations: 936

Education

2018.09 – 2024.09 🔖 **Ph.D. , Zhejiang University, China & Westlake University, China** Computer Science.
Supervisor: Prof. Yue Zhang
Thesis title: *Research on Logical Reasoning in Large Language Models.*

2011.08 – 2015.06 🔖 **Bachelor, Nankai University, China** Logic.
Thesis title: *Investigating Informal Logical Fallacies in Propaganda.*

Research Publications

1. Ding, Mengru, **Hanmeng Liu**, Zhizhang Fu, Jian Song, Wenbo Xie, and Yue Zhang (2024). *Break the Chain: Large Language Models Can be Shortcut Reasoners*. arXiv: 2406.06580 [cs.CL]. 🔗 URL: https://arxiv.org/abs/2406.06580.

2. Hanmeng, Liu and Zhang Yue (July 2024). "□□□□□□□□□□□(Survey on Logical Reasoning of Large Pre-trained Language Models)". zho. In: *Proceedings of the 23rd Chinese National Conference on Computational Linguistics (Volume 2: Frontier Forum)*. Ed. by Xin Zhao. Taiyuan, China: Chinese Information Processing Society of China, pp. 48–62. 🔗 URL: https://aclanthology.org/2024.ccl-2.3/.

3. **Liu**, **Hanmeng**, Leyang Cui, Jian Liu, and Yue Zhang (May 2021). "Natural Language Inference in Context - Investigating Contextual Reasoning over Long Texts". In: *Proceedings of the AAAI Conference on Artificial Intelligence* 35.15, pp. 13388–13396.

4. **Liu**, **Hanmeng**, Zhizhang Fu, Mengru Ding, Ruoxi Ning, Chaoli Zhang, Xiaozhang Liu, and Yue Zhang (2025). *Logical Reasoning in Large Language Models: A Survey*. arXiv: 2502.09100 [cs.AI]. 🔗 URL: https://arxiv.org/abs/2502.09100.

5. **Liu**, **Hanmeng**, Jian Liu, Leyang Cui, Zhiyang Teng, Nan Duan, Ming Zhou, and Yue Zhang (2023). "LogiQA 2.0—An Improved Dataset for Logical Reasoning in Natural Language Understanding". In: *IEEE/ACM Transactions on Audio, Speech, and Language Processing* 31, pp. 2947–2962. 🔗 DOI: 10.1109/TASLP.2023.3293046.

6. **Liu**, **Hanmeng**, Ruoxi Ning, Zhiyang Teng, Jian Liu, Qiji Zhou, and Yue Zhang (2023). "Evaluating the Logical Reasoning Ability of ChatGPT and GPT-4". In: arXiv: 2304.03439 [cs.CL].

7. **Liu**, **Hanmeng**, Zhiyang Teng, Leyang Cui, Chaoli Zhang, Qiji Zhou, and Yue Zhang (Oct. 2023). "LogiCoT: Logical Chain-of-Thought Instruction-Tuning with GPT-4". In: EMNLP Under Review. arXiv: 2305.12147 [cs.CL].

8. **Liu**, **Hanmeng**, Zhiyang Teng, Ruoxi Ning, Chaoli Zhang, Jian Liu, Qiji Zhou, and Yue Zhang (Oct. 2023). "GLoRE: Evaluating Logical Reasoning of Large Language Models". In: EMNLP 2023. arXiv: 2304.03439 [cs.CL].

9. Liu, Jian, Leyang Cui, **Hanmeng Liu**, Dandan Huang, Yile Wang, and Yue Zhang (2020). "LogiQA: A Challenge Dataset for Machine Reading Comprehension with Logical Reasoning". In: International Joint Conferences on Artificial Intelligence Organization (IJCAI). arXiv: 2007.08124 [cs.CL].

10. Liu, Jian, Zhiyang Teng, Leyang Cui, **Hanmeng Liu**, and Yue Zhang (Nov. 2021). "Solving Aspect Category Sentiment Analysis as a Text Generation Task". In: *Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing*. Association for Computational Linguistics (EMNLP), pp. 4406–4416.

11. Yang, Linyi, Shuibai Zhang, Libo Qin, Yafu Li, Yidong Wang, **Hanmeng Liu**, Jindong Wang, Xing Xie, and Yue Zhang (July 2023). "GLUE-X: Evaluating Natural Language Understanding Models from an Out-of-Distribution Generalization Perspective". In: *Findings of the Association for Computational Linguistics: ACL 2023*. Toronto, Canada: Association for Computational Linguistics, pp. 12731–12750. 🔗 DOI: 10.18653/v1/2023.findings-acl.806. 🔗 URL: https://aclanthology.org/2023.findings-acl.806.

Working Experience

2025.04.12 – Now **Hainan University, China** Associate Professor.
Supervisor: Xiaozhang Liu
Research area: Reasoning, multimodal LLMs

2024.10.13 – 2025.04.09 **ICT, HUAWEI, China** Senior Engineer.
Supervisor: Qi Zhang
Research area: LLM applications. Business Intelligence. AI Committer.

2021.01.04 – 2021.11.10 **Damo Academy, Alibaba Group, China** NLP department intern.
Supervisor: Yifan He
Research area: Medical relation extraction. Chemical-disease relation, drug-disease relation. Data cleaning and annotation. Dataset releases. PubMed fine-tuning.

Academic Activities

Reviewer for Journals and Conferences
Transactions on Audio, Speech and Language Processing (2023)
EMNLP, AAAI, IJCAI (2022)

Invited Lectures
ChatGPT and Large Language Models: History and the underlying techniques. School of Computer Science, Zhejiang Normal University (2023.08).
Natural Language Inference: A unified framework. School of Engineering, Westlake University (2022.04).
Natural Language Inference in Context - Investigating Contextual Reasoning over Long Texts. AAAI Pre-lecturing, Beijing (2021.02).

Teaching Experiences

2022.08 – 2023.02 **Natural Language Processing Online Course** by Prof. Yue Zhang. Online course. **MOOC**.
My role: video recording, editing and publishing, teaching assistant.

2022.03 – 2015.07 **Academic English writing and speaking** by Prof. Travis Gregory Todd. Undergraduate course. Westlake University. My role: teaching assistant.

2021.08 – 2022.02 **Natural Language Processing - A Machine Learning Perspective** by Prof. Yue Zhang. Graduate course. Westlake University. My role: teaching assistant.

Skills

Languages — Strong reading, writing, and speaking competencies in English.
Coding — Python (Pytorch, Transformers, Numpy, Pandas); Finetuning LLaMA; OpenAI applications.
Misc. — Online courses teaching; LaTeX typesetting and publishing; videography and video editing.

Awards

CCF Award 2024