Jinhao Jiang

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Education

Renmin University of China 2021 – 2026 (expected)

Ph.D. student in Artificial Intelligence Supervisor: Xin Zhao

University of Electronic Science and Technology of China 2017 – 2021

B.S. in Software Engineering

Research

My research is mainly focused on Large Language Model + Structured Data (KG, DB, and Tables) including:

- *Knowledge-agumented LLMs*: how to augment LLMs with external knowledge for question answering (CommonsenseQA, KGQA), factual hallucinations reduction, and knowledge editing;
- *LLMs reasoning on Structured Data*: how to enable LLMs to reason over knowledge graph, to generate SQL query, or to reason over tables.
- *LLMs as Agents*: build human-like agents with the ability to memorize, plan, and receive feedback by interacting with the external environment (KG, DB, Tables), fine-tune smaller LLMs as autonomous agents like stronger LLMs.

Publications

* Equal contributions

A Survey of Large Language Models

Wayne Xin Zhao, Kun Zhou*, Junyi Li*, Tianyi Tang, Xiaolei Wang, Yupeng Hou, Yingqian Min, Beichen Zhang, Junjie Zhang, Zican Dong, Yifan Du, Chen Yang, Yushuo Chen, Zhipeng Chen, **Jinhao Jiang**, Ruiyang Ren, Yifan Li, Xinyu Tang, Zikang Liu, Peiyu Liu, Jian-Yun Nie and Ji-Rong Wen
arXiv:2303.18223

StructGPT: A General Framework for Large Language Model to Reason over Structured Data

Jinhao Jiang*, Kun Zhou*, Zican Dong, Keming Ye, Wayne Xin Zhao, and Ji-Rong Wen
The 2023 Conference on Empirical Methods in Natural Language Processing. **EMNLP 2023**

ReasoningLM: Enabling Structural Subgraph Reasoning in Pre-trained Language Models for Question Answering over Knowledge Graph

Jinhao Jiang*, Kun Zhou, Wayne Xin Zhao, Yaliang Li, and Ji-Rong Wen
The 2023 Conference on Empirical Methods in Natural Language Processing. **EMNLP 2023**

UniKGQA: Unified Retrieval and Reasoning for Solving Multi-hop Question Answering Over Knowledge Graph

Jinhao Jiang*, Kun Zhou*, Wayne Xin Zhao, and Ji-Rong Wen
International Conference on Learning Representations. **ICLR 2023**

Great Truths are Always Simple: A Rather Simple Knowledge Encoder for Enhancing the Commonsense Reasoning Capacity of Pre-Trained Models

Jinhao Jiang*, Kun Zhou*, Wayne Xin Zhao and Ji-Rong Wen
In Findings of 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistic. **NAACL 2022-Findings**

Complex Knowledge Base Question Answering: A Survey

Yunshi Lan*, Gaole He*, **Jinhao Jiang**, Jing Jiang, Wayne Xin Zhao, and Ji-Rong Wen
IEEE Transactions on Knowledge and Data Engineering. **TKDE 2022**

TextBox: A Unified, Modularized, and Extensible Framework for Text Generation

Junyi Li, Tianyi Tang, Gaole He, **Jinhao Jiang**, Xiaoxuan Hu, Puzhao Xie, Zhipeng Chen, Zhuohao Yu, Wayne Xin Zhao and Ji-Rong Wen
In the 59th Annual Meeting of the Association for Computational Linguistic. **ACL 2021**

A survey on complex knowledge base question answering: Methods, challenges and solutions

Yunshi Lan*, Gaole He*, **Jinhao Jiang**, Jing Jiang, Wayne Xin Zhao, and Ji-Rong Wen
The 30th International Joint Conference on Artificial Intelligence. **IJCAI 2021**

Open-source Projects

TextBox: An up-to-date text generation library with 1k+ stars in GitHub.

- A comprehensive, unified, and standardized library for users.
- It covers 13 common text generation tasks, 47 pre-trained language models, and 83 text generation datasets.
- Easy for users to reproduce text generation models and develop new algorithms.

Academic Service

Reviewer

- Journal: TALLIP, Computational Intelligence, Information Retrieval Jourbal
- Conference: EMNLP 2023

Honors and Awards

Outstanding Graduates of Sichuan Province *(winning ratio 3.7%)*, Education Department of Sichuan. 2021
China National Scholarship *(top 1.5%)*, Ministry of Education of the People's Republic of China. 2020
China National Scholarship *(top 1.5%)*, *Ministry of Education of the People's Republic of China.* 2019