

## Links to the publications in the past 2 years

- [1] **Bo Xiong**, Mojtaba Nayyeri, Linhao Luo, Zihao Wang, Shirui Pan, and Steffen Staab. [NestE: Modeling Nested Relational Structures for Knowledge Graph Reasoning](#). The 38th AAAI Conference on Artificial Intelligence (AAAI), 2024.
- [2] **Bo Xiong**, Mojtaba Nayyeri, Shirui Pan, Steffen Staab. [Shrinking Embeddings for Hyper-Relational Knowledge Graphs](#). Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (ACL), 2023.
- [3] Eric Lee, **Bo Xiong**, Carl Yang and Joyce Ho. [HypMix: Hyperbolic Representation Learning for Graphs with Mixed Hierarchical and Non-hierarchical Structures](#). The 33rd ACM International Conference on Information and Knowledge Management (CIKM), 2024.
- [4] Yunjie He, Daniel Hernandez, Mojtaba Nayyeri, **Bo Xiong**, Yuqicheng Zhu, Evgeny Kharlamov, Steffen Staab. [Generating  \$\mathcal{SROIT}^-\$  Ontologies via Knowledge Graph Query Embedding Learning](#). Proceedings of the 27th European Conference on Artificial Intelligence (ECAI), 2024.
- [5] Zifeng Ding, Jingcheng Wu, Jingpei Wu, Yan Xia, **Bo Xiong**, Volker Tresp. [Temporal Fact Reasoning over Hyper-Relational Knowledge Graphs](#). Findings of the 2024 Conference on Empirical Methods in Natural Language Processing. (EMNLP) 2024.
- [6] Yuqicheng Zhu, Nico Potyka, Mojtaba Nayyeri, **Bo Xiong**, Yunjie He, Evgeny Kharlamov, Steffen Staab. [Predictive Multiplicity of Knowledge Graph Embeddings in Link Prediction](#). Findings of the 2024 Conference on Empirical Methods in Natural Language Processing. (EMNLP) 2024.
- [7] Ruirui Chen, Weifeng Jiang, Chengwei Qin, Ishaan Singh Rawal, Cheston Tan, Dongkyu Choi, **Bo Xiong**, Bo Ai. [LLM-Based Multi-Hop Question Answering with Knowledge Graph Integration in Evolving Environments](#). Findings of the 2024 Conference on Empirical Methods in Natural Language Processing. (EMNLP) 2024.
- [8] Menglin Yang, Aosong Feng, **Bo Xiong**, Jiahong Liu, Irwin King, Rex Ying. [Enhancing LLM Complex Reasoning Capability through Hyperbolic Geometry](#). Workshop on LLMs and Cognition. International Conference on Machine Learning (LLM & Cognition@ICML), 2024.
- [9] Zifeng Ding, Heling Cai, Jingpei Wu, Yunpu Ma, Ruotong Liao, **Bo Xiong**, Volker Tresp. [zrLLM: Zero-Shot Relational Learning on Temporal Knowledge Graphs with Large Language Models](#). Proceedings of the Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2024.
- [10] Yanchao Tan, Hang Lv, Zihao Zhou, Wenzhong Guo, **Bo Xiong**, Weiming Liu, Chaochao Chen, Shiping Wang, and Carl Yang. [Logical Relation Modeling and Mining in Hyperbolic Space for Recommendation](#). The 40th IEEE International Conference on Data Engineering (ICDE), 2024.
- [11] Mojtaba Nayyeri, **Bo Xiong**, Majid Mohammadi, Mst. Mahfuja Akter, Mirza Mohtashim Alam, Jens Lehmann, Steffen Staab. [Knowledge Graph Embeddings using Neural Ito Process: From Multiple Walks to Stochastic Trajectories](#). Findings of the Association for Computational Linguistics: ACL (ACL), 2023.
- [12] Jiaying Lu, Jiaming Shen, **Bo Xiong**, Wenjing Ma, Steffen Staab, and Carl Yang. [HiPrompt: Few-Shot Biomedical Knowledge Fusion via Hierarchy-Oriented Prompting](#). In Proceedings of The 46th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2023.