Title: Enhancing Language Generation with Knowledge Graphs

Abstract:
Text-to-text generation models have been developed for various applications such as machine translation, text summarization, question answering, and commonsense reasoning. They are often trained to produce text with text as the only input. However, their performance suffers from lack of knowledge that text-to-text mapping could not discover. Knowledge graphs have tons of relational information about concepts and/or entities that can be used to enhance language generation. In this talk, I will introduce our recent work in NAACL 2021, ACL 2022, and EMNLP 2022. The knowledge-enhanced language generation models can improve the precision of machine translation, factual correctness of abstractive summarization, accuracy of question answering, and diversity of commonsense reasoning.

Bio:
Meng Jiang is an assistant professor in the Department of Computer Science and Engineering at the University of Notre Dame. He is interested in data mining and natural language processing. His data science research focuses on graph and text data for applications such as question answering, material science, biomedicine, and mental healthcare. He received the NSF CAREER award in 2022.