

POPULATION HEALTH SCIENCES SPECIAL SEMINAR

**"Knowledge-aware NLP Techniques
for Trustworthy AI Systems"**



Date: September 19
Time: 10:00AM
Join us via Zoom

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Abstract

The rapid advancement of natural language processing (NLP) technologies has significantly improved various real-world applications. However, ensuring the trustworthiness of AI systems remains a critical challenge, particularly in areas such as domain-specific text classification and summarization. In this talk, I will present my work on knowledge-aware natural language processing techniques, focusing on knowledge extraction, alignment, and application algorithms. These efforts aim to construct well-organized knowledge graphs in low-resource scenarios and integrate specific knowledge to enhance traditional models by improving their interpretability, robustness, and reliability. This contributes to building more trustworthy AI systems. Additionally, I will discuss potential future directions for trustworthy AI, with a particular focus on applications in AI for Health and AI for Social Science.

About Ye Liu

Ye Liu is currently a PhD candidate at the School of Artificial Intelligence and Data Science, University of Science and Technology of China (USTC), and a member of State Key Laboratory of Cognitive Intelligence. His supervisor is Prof. Enhong Chen. He is also a visiting PhD student with Prof. Xiaofang Zhou at The Hong Kong University of Science and Technology (HKUST). Previously, Ye interned at ByteDance - AI LAB and Huawei Cloud & AI, as an algorithm intern. He received his bachelor's degree from USTC in July 2019, and majored in electronic information engineering.

Ye's research interests encompass a wide range of subjects within the fields of knowledge-aware natural language processing (NLP), focusing on two main areas: (1) knowledge acquisition and (2) knowledge application. Recently, he has been focusing on the research of knowledge-enhanced large language models (LLMs). He has published more than 20 papers at top international conferences/journals, such as ACL, ICML, IJCAI and TKDD.