

Reasoning about technical language for incomplete knowledge graphs using query embedding



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Virtual - Researchers Catch-up

Reasoning about the text in technical domains such as maintenance work orders is an open challenge since knowledge graphs are unavailable. Texts in a technical domain contain words that are "out-of-vocabulary". We refer to these types of text as "unstructured", as the text includes many abbreviations and jargon, preventing machines from understanding the meaning of texts.

In this talk, I will present how I plan to overcome this challenge by 'Query Embedding for Knowledge Graphs (KGs)' using Multi-hop Reasoning. I will also discuss overcoming the problem of incomplete knowledge graphs, an issue common when using data in real situations. This is a critical issue because you cannot use a query language to reason about technical texts if you have incomplete knowledge graphs.

Lastly, I will share some ideas regarding future work and look forward to hearing your thoughts and feedback on my research topic.