

GraphRAG based research data retrieval

Wednesday 16 July 2025 14:24 (3 minutes)

The presentation will introduce a GraphRAG-based approach to research data retrieval from research data catalogues, using the Text+ Registry as an example.

Retrieval-Augmented Generation (RAG) systems have become a cornerstone for LLM-based question-answering tasks involving individual (potentially private or sensitive) unstructured data. However, traditional RAG pipelines often lack an in-depth understanding of the underlying data and the ability to retrieve contextual information from it.

GraphRAG based approaches can address this by utilizing structured data in a knowledge graph to capture deeper relational context, enabling more precise retrieval and a more nuanced understanding.

The first implementation has already shown that GraphRAG outperforms standard RAG in terms of both retrieval precision and response quality.

The presentation will also contain a system demonstration.

I want to give a Lightning Talk

yes

Author: LEHMBERG, Timm (Akademie der Wissenschaften in Hamburg)

Presenter: LEHMBERG, Timm (Akademie der Wissenschaften in Hamburg)

Session Classification: Lightning Talks