

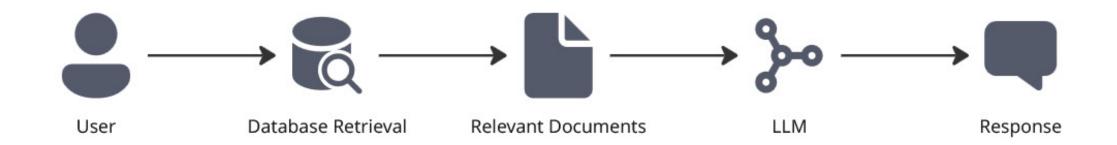
Introduction to Retrieval-Augmented Generation (RAG)

Enhancing AI with External Knowledge

Marios Constantinou



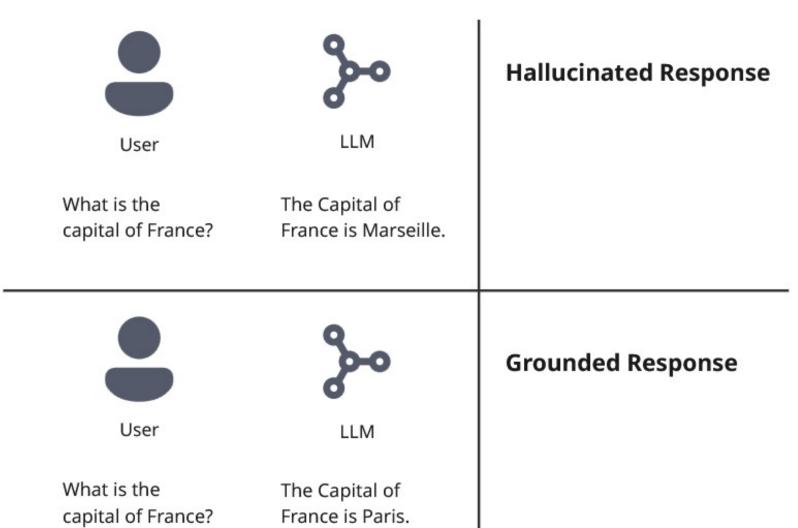
What is Retrieval- Augmented Generation?



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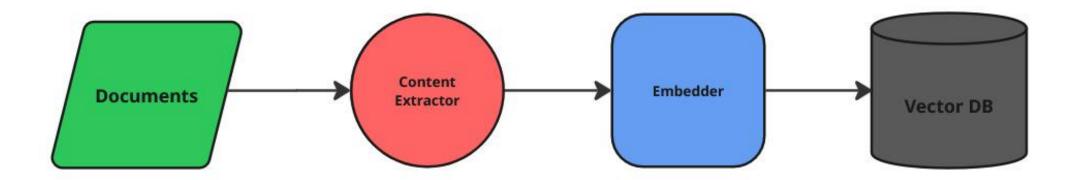
Why use RAG?





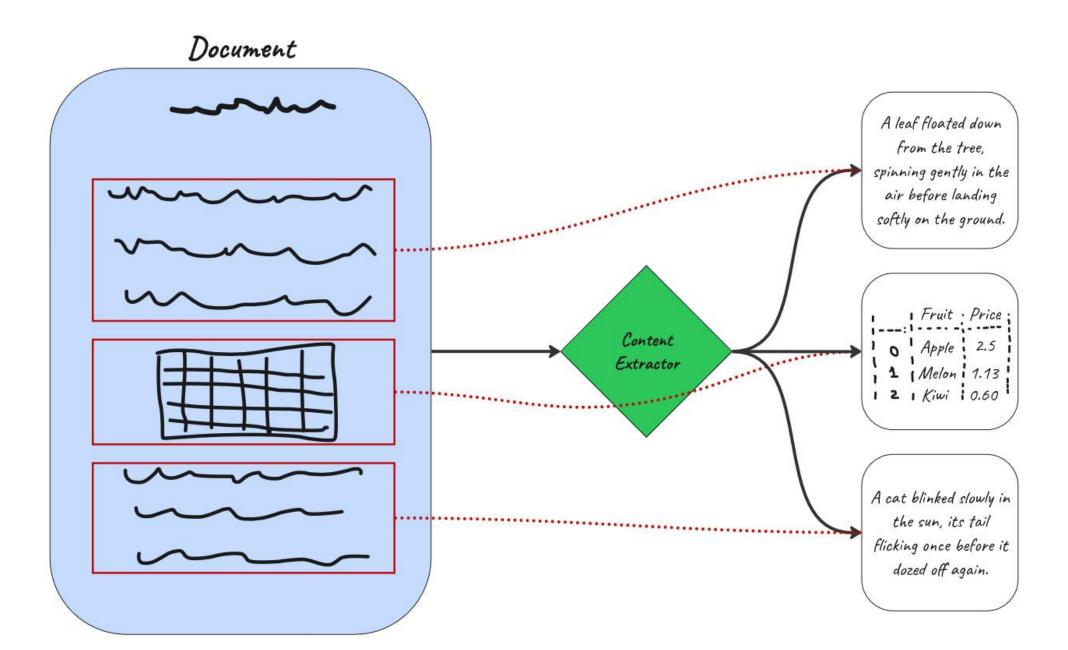
How does it work?

Indexing Pipeline

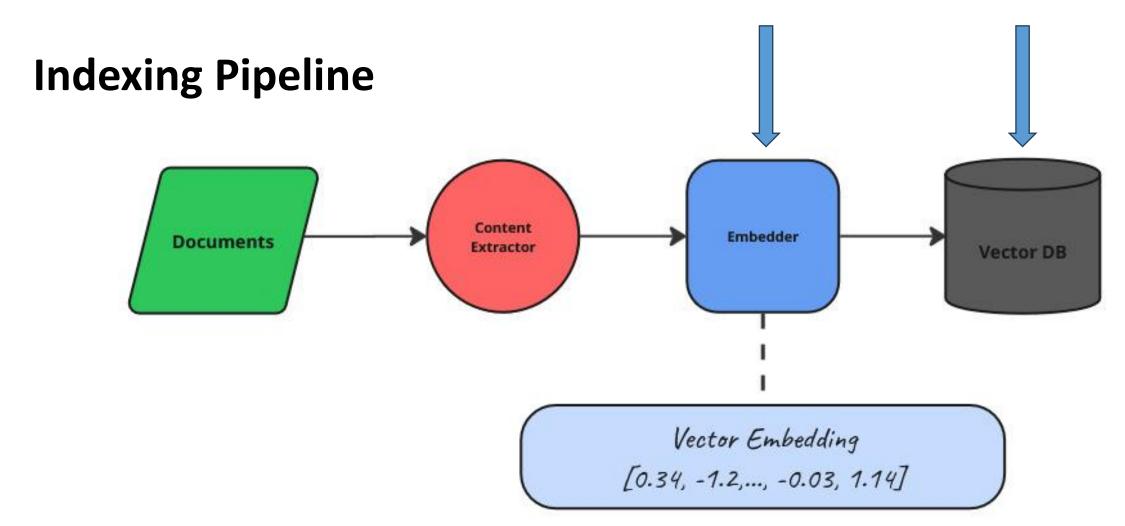


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Content Extraction

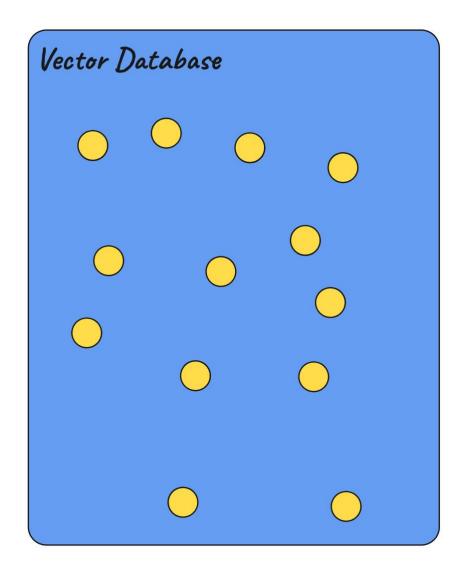






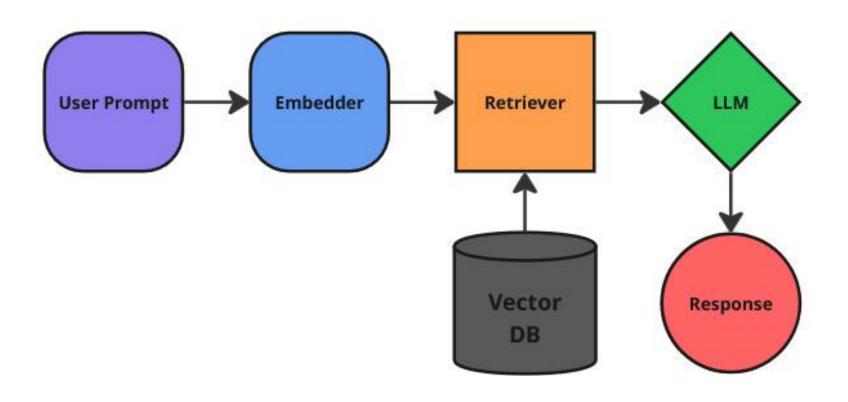


Vector Database



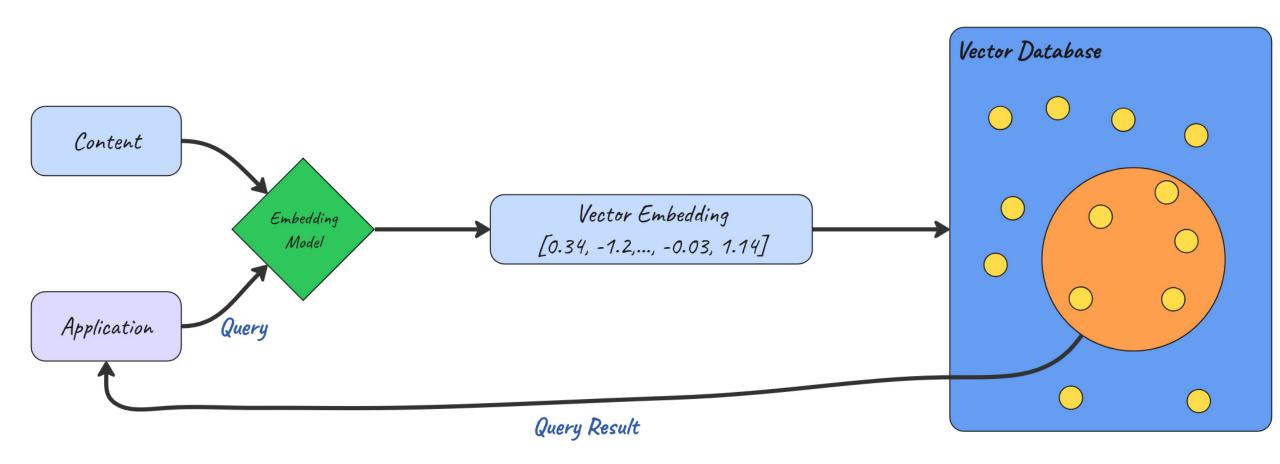


RAG Pipeline



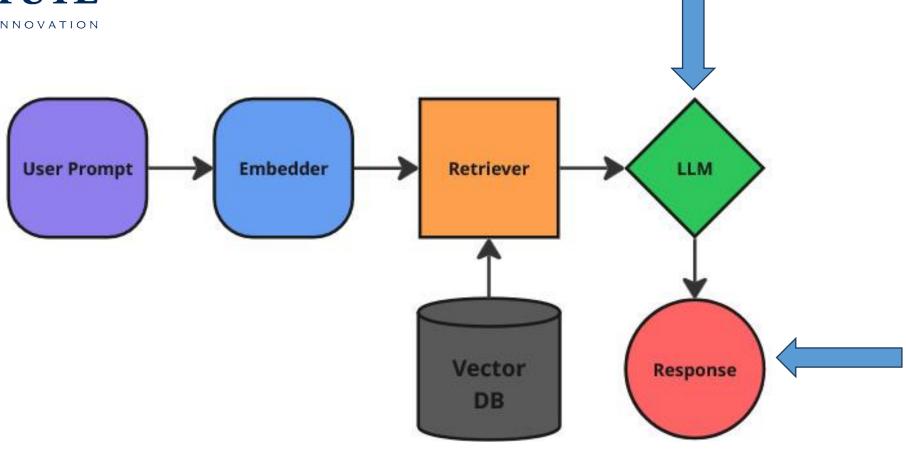


Embedding Retriever





RAG Pipeline



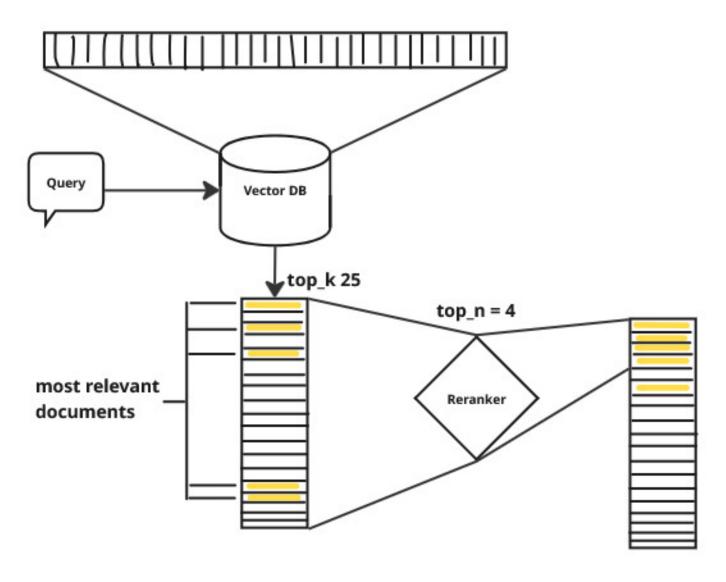


Tricks to boost RAG performance

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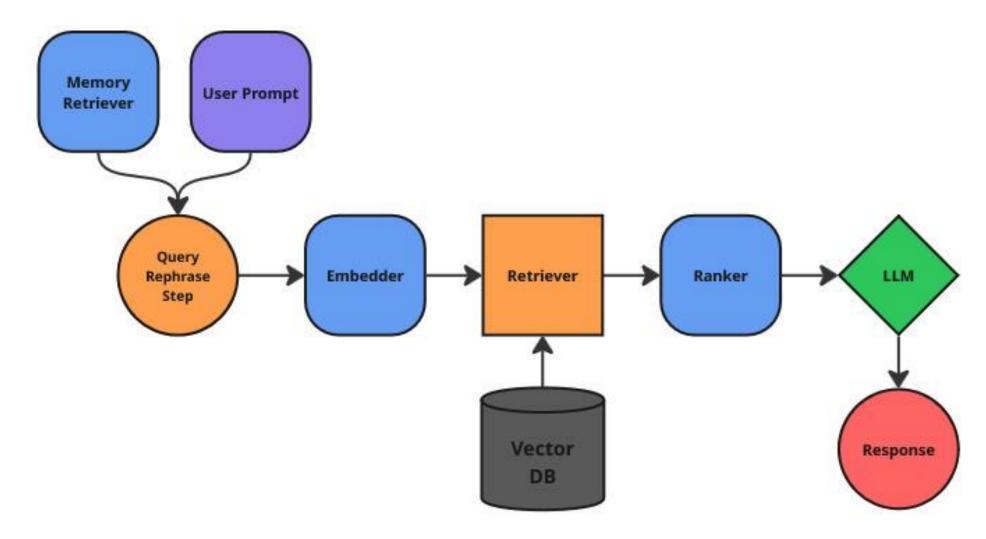


Re-Ranking Documents



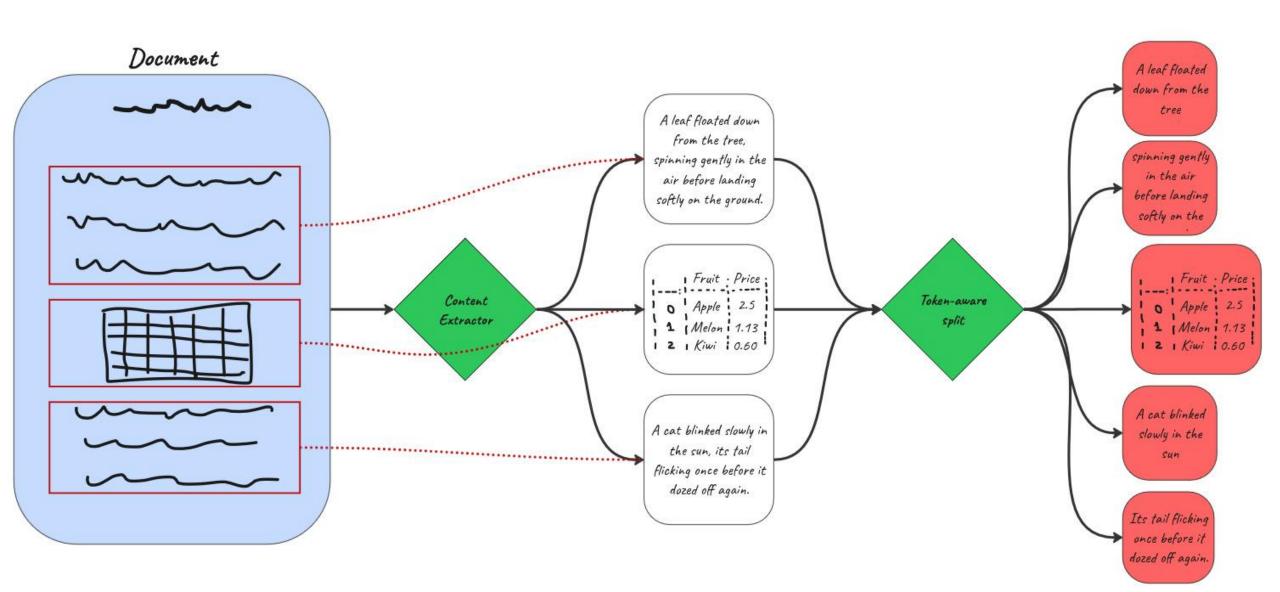


Query Rephrasing





Hybrid Chunking





https://tinyurl.com/bd53yjvy



https://github.com/CaSToRC-CyI/AI-Agents-Training

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