

Top 5 RAG Frameworks for **Al Applications**

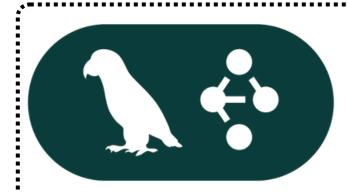








LangChain



LangGraph



LangChain



<u>LangChain</u> is a flexible framework that simplifies the development of applications using LLMs. It provides tools for building RAG applications, making integration straightforward.

- Modular design for easy customization.
- Supports various LLMs and data sources.
- Built-in tools for document retrieval and processing.
- Suitable for chatbots and virtual assistants.





LlamaIndex



<u>LlamaIndex</u>, previously known as the GPT Index, focuses on organizing and retrieving data efficiently for LLM applications. It helps developers access and use large datasets quickly.

- Organizes data for fast lookups.
- Customizable components for RAG workflows.
- Supports multiple data formats, including PDFs and SQL.
- Integrates with vector stores like <u>Pinecone</u> and <u>FAISS</u>.





LangGraph



<u>LangGraph</u> connects LLMs with graph-based data structures. This framework is useful for applications that require complex data relationships.

- Efficiently retrieves data from graph structures.
- Combines LLMs with graph data for better context.
- Allows customization of the retrieval process.



Haystack



<u>Haystack</u> is an end-to-end framework for developing applications powered by LLMs and transformer models. It excels in document search and question answering.

- Combines document search with <u>LLM</u> capabilities.
- Uses various retrieval methods for optimal results.
- Offers pre-built pipelines for quick development.
- Compatible with Elasticsearch and OpenSearch.





RAGFlow



<u>RAGFlow</u> focuses on integrating retrieval and generation processes. It streamlines the development of RAG applications.

- Simplifies the connection between retrieval and generation.
- Allows for tailored workflows to meet project needs.
- Integrates easily with various databases and document formats.