Agentic RAG

Agentic RAG stands for Agentic **Retrieval-Augmented Generation.** It is an advanced AI approach that combines traditional RAG systems with agent-based reasoning**.** It combines LLMs, information retrieval and autonomous decision making.

Traditional RAG systems works by retrieving relevant documents and pass them to LLMs to generate an answer.They usually follow a fixed pattern of retrieve once and answer.In contrast, Agentic RAG improves on this by allowing an AI agent to act like a decision-maker.The agent can break down a question into parts, search multiple times, and plan how to get the most accurate answer. Instead of following a fixed pattern, the agent uses reasoning and memory to decide what to do next. This makes Agentic RAG more interactive and capable of solving complex problems.

Agentic RAG is useful in tasks that need multiple steps, such as technical research, legal analysis, customer service, and software development. It allows the AI to interact with its environment like a human assistant would.It is especially useful when the answer to a question can’t be found in just one place. By mimicking human-like problem solving, Agentic RAG enables more reliable and helpful AI systems.

For example, if you ask a complex question, the agent might first find background info, then gather statistics, and finally combine all of it into a well-formed answer. Agentic RAG is useful in research, customer support, coding help, and any task that needs reasoning over several sources.

It brings together reasoning (from agents) and knowledge retrieval (from RAG) to make AI more powerful and flexible.