

Multi-Agent LLM Apps

Intro to LangGraph

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What is LangGraph?

- A framework to build Multi-Agent LLM Apps.
- Built on top of LangChain.
- Intended to be used with LangChain.

Why LangGraph?

- Launched in February 2024.
- Until then, LangChain lacked a method for easily introducing cycles in chains.
- The core functionality of AI Agents are loops; the core functionality of LangGraph are cycles.

The need for Agentic Behavior

- Use case: a loop would improve RAG performance.

The simplest agent (the simplest agentic loop)

1. Call the LLM to determine: action or result?
2. Perform action and go back to 1.

Often, you need to add more control in agents

- If you do not define clear steps and controls, agents can get involved in infinite loops or hallucinations.
- Ways to add control:
 - Force to call a particular tool first.
 - Control over how tools are called.
 - Control over prompts.
 - Etc.
- Adding more control in agents with LangGraph.

The future of LangGraph

- Multi-agent workflows.
- More control over agents.
- More control over memory.