

LangChain 生态综述

LangChain Ecosystem Walkthrough

Press Space for next page →

张海立

KubeSphere Ambassador, CNCF OpenFunction TOC Member

驭势科技 UISEE® 云平台研发总监，开源爱好者

云原生专注领域: Kubernetes, DevOps, FaaS, Observability

AGI 专注领域: LangChain, RAG, Prompt Engineering, GenAI



[zhanghaili](#)

[webup](#)

[zhanghaili0610](#)

[沧海九粟 · Bilibili](#)



开局一张图

从 LangChain 生态全景（架构）图说起

On this page



Introduction

LangChain is a framework for developing applications powered by language models. It enables applications that:

- **Are context-aware:** connect a language model to sources of context (prompt instructions, few shot examples, content to ground its response in, etc.)
- **Reason:** rely on a language model to reason (about how to answer based on provided context, what actions to take, etc.)

This framework consists of several parts.

- **LangChain Libraries:** The Python and JavaScript libraries. Contains interfaces and integrations for a myriad of components, a basic run time for combining these components into chains and agents, and off-the-shelf implementations of chains and agents.
- **LangChain Templates:** A collection of easily deployable reference architectures for a wide variety of tasks.



LangChain 类库

定位：本地构建 LLM 原型应用

- **langchain-core** 包含了核心抽象和 LangChain Expression Language (LCEL)
 - 版本已经达到 0.1, 未来的任何破坏性变更都会带来小版本升级 (0.x)
 - 模块化的抽象为第三方集成提供标准接口
- **langchain-community** 包含 第三方集成
 - 主要集成将被进一步拆分为独立软件包
 - 目前, LangChain 拥有近 700 个集成
- **langchain** 包含了实际运用的 Chain、Agent 和 Retriever 流程策略
 - 官方计划 1/9 推出 0.1 稳定版本



LANGCHAIN BLOG



Towards LangChain 0.1: LangChain-Core and LangChain-Community

14 MIN READ DEC 12, 2023



Subscribe



LangChain

[653 integrations](#)[+ Request an integration](#)[Document Loaders \(163\)](#)[Vector Stores \(65\)](#)[Embedding Models \(52\)](#)[Chat Models \(29\)](#)[LLMs \(80\)](#)[Callbacks \(27\)](#)[Tools \(112\)](#)[Toolkits \(21\)](#)[Message Histories \(17\)](#) Search

Popularity

AirbyteJSONLoader



Load local `Airbyte` json files.

[Docs](#)[Github](#)

50

ApifyDatasetLoader



Load datasets from `Apify` web scraping, crawling, and...

[Docs](#)[Github](#)

40



LangChain 模板

定位：提供预制的可参考的 LLM 原型应用

通常配合 LangServe 一起使用（三步走）：

1 安装 `langchain-cli`

```
pip install -U langchain-cli
```

2 （创建新项目）导入指定模版

```
langchain app new my-app --package $PACKAGE_NAME
langchain app add $PACKAGE_NAME
# adding custom GitHub repo packages
langchain app add --repo $OWNER/$REPO
```

3 绑定 LangServe 服务端点（`server.py`）

```
add_routes(app, chain, path="/chain-path")
```

启动！`langchain serve`



LANGCHAIN BLOG



These are some of the more popular templates to get started with.

- [Retrieval Augmented Generation Chatbot](#): Build a chatbot over your data. Defaults to Cohere's generation endpoint.
- [Extraction with OpenAI Functions](#): Do extraction of structured data from unstructured text using OpenAI's functions.
- [Local Retrieval Augmented Generation](#): Build a chatbot over your data. Uses only local storage and retrieval.
- [OpenAI Functions Agent](#): Build a chatbot that can take actions. Uses OpenAI functions.
- [XML Agent](#): Build a chatbot that can take actions. Uses Anthropic and You.com.



Advanced Retrieval

These templates cover advanced retrieval techniques.

- [Reranking](#): This retrieval technique uses Cohere's reranking endpoint to rerank documents based on user input.

LangChain Templates

6 MIN READ OCT 31, 2023



Subscribe

Today we're excited to announce the



LangChain Templates

[+ Request a template](#)

Featured

rag[OpenAI](#)[Pinecone](#)**rag-conversation**

by Elastic

Conversational RAG using Pinecone

[Github](#)[8](#)**extraction**[OpenAI](#)[Function Calling](#)**extraction-openai-functions**

by LangChain

Use OpenAI function calling for tasks like extraction or...

[Github](#)[10](#)



定位：一键 REST 服务化 LLM 原型应用 ↗



LangChain ✅

@LangChainAI · [Follow](#)



Introduction LangServe

The best way to deploy your
LangChains



Input/Output schema

/docs endpoint

invoke/batch/stream endpoints

/stream_log endpoint for streaming
intermediate steps

LangSmith Integration

Used to power ChatLangChain and
WebLangChain



LANGCHAIN BLOG



default

POST /invoke Invoke

POST /batch Batch

POST /stream Stream

POST /stream_log Stream Log

GET /input_schema Input Schema

GET /output_schema Output Schema

GET /config_schema Config Schema

Schemas

BatchRequest >

BatchResponse >

Introducing LangServe, the best way to deploy your LangChains

BY LANGCHAIN 5 MIN READ OCT 12, 2023



定位：提供全生命周期的可观测能力



Home > LangSmith

On this page

LangSmith

Introduction

LangSmith is a platform for building production-grade LLM applications.



LANGCHAIN BLOG



Introducing LangSmith

The screenshot shows the LangSmith AgentExecutor interface. On the left, there's a text input field with the following JSON input:

```
1 {
2   "input": "how many
3   points were scored
4   in the
5   2023 super bowl, the
6   2022 super bowl?"
7 }
```

On the right, the AI output is displayed in a code editor-like pane:

```
1 {
2   "output": "The final
3   score of the 2023
4   Super Bowl was Kansas City
5   Chiefs vs Philadelphia
6   Eagles 35. \n\nThe
7   score of the 2022
8   Super Bowl was Los Angeles
9   Rams vs Cincinnati Bengals
10  23. \n\nTherefore, the
11  15 more points scor
```

Announcing LangSmith, a unified platform for debugging, testing, evaluating, and monitoring your LLM applications



Subscribe



LangServe + LangSmith 演示

Talk is cheap, show me the code or data or whatever 🤓

感谢聆听 ❤

⌚ webup | 🎤 serviceup