

Chatbot

June 19, 2025

```
[1]: !pip install faiss-gpu
!pip install pypdf
!pip install -U langchain-community
!pip install tiktoken
!pip install --upgrade gradio
!pip install -U langchain-openai
```

Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: faiss-gpu in ./local/lib/python3.10/site-packages (1.7.2)

Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: pypdf in /usr/local/lib/python3.10/site-packages (3.17.1)

Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: langchain-community in ./local/lib/python3.10/site-packages (0.3.25)

Requirement already satisfied: langchain-core<1.0.0,>=0.3.65 in ./local/lib/python3.10/site-packages (from langchain-community) (0.3.65)

Requirement already satisfied: langchain<1.0.0,>=0.3.25 in ./local/lib/python3.10/site-packages (from langchain-community) (0.3.25)

Requirement already satisfied: SQLAlchemy<3,>=1.4 in /usr/local/lib/python3.10/site-packages (from langchain-community) (1.4.20)

Requirement already satisfied: requests<3,>=2 in /usr/local/lib/python3.10/site-packages (from langchain-community) (2.31.0)

Requirement already satisfied: PyYAML>=5.3 in /usr/local/lib/python3.10/site-packages (from langchain-community) (6.0.1)

Requirement already satisfied: aiohttp<4.0.0,>=3.8.3 in /usr/local/lib/python3.10/site-packages (from langchain-community) (3.9.1)

Requirement already satisfied: tenacity!=8.4.0,<10,>=8.1.0 in /usr/local/lib/python3.10/site-packages (from langchain-community) (8.2.3)

Requirement already satisfied: dataclasses-json<0.7,>=0.5.7 in /usr/local/lib/python3.10/site-packages (from langchain-community) (0.5.13)

Requirement already satisfied: pydantic-settings<3.0.0,>=2.4.0 in ./local/lib/python3.10/site-packages (from langchain-community) (2.9.1)

Requirement already satisfied: langsmith<0.4,>=0.1.125 in ./local/lib/python3.10/site-packages (from langchain-community) (0.3.45)

Requirement already satisfied: httpx-sse<1.0.0,>=0.4.0 in ./local/lib/python3.10/site-packages (from langchain-community) (0.4.0)

Requirement already satisfied: numpy>=1.26.2 in /usr/local/lib/python3.10/site-packages (from langchain-community) (1.26.2)

Requirement already satisfied: attrs>=17.3.0 in /usr/local/lib/python3.10/site-packages (from aiohttp<4.0.0,>=3.8.3->langchain-community) (23.1.0)

Requirement already satisfied: multidict<7.0,>=4.5 in /usr/local/lib/python3.10/site-packages (from aiohttp<4.0.0,>=3.8.3->langchain-community) (6.0.4)

Requirement already satisfied: yarl<2.0,>=1.0 in /usr/local/lib/python3.10/site-packages (from aiohttp<4.0.0,>=3.8.3->langchain-community) (1.9.3)

Requirement already satisfied: frozenlist>=1.1.1 in /usr/local/lib/python3.10/site-packages (from aiohttp<4.0.0,>=3.8.3->langchain-community) (1.4.0)

Requirement already satisfied: aiosignal>=1.1.2 in /usr/local/lib/python3.10/site-packages (from aiohttp<4.0.0,>=3.8.3->langchain-community) (1.3.1)

Requirement already satisfied: async-timeout<5.0,>=4.0 in /usr/local/lib/python3.10/site-packages (from aiohttp<4.0.0,>=3.8.3->langchain-community) (4.0.3)

Requirement already satisfied: marshmallow<4.0.0,>=3.18.0 in /usr/local/lib/python3.10/site-packages (from dataclasses-json<0.7,>=0.5.7->langchain-community) (3.20.1)

Requirement already satisfied: typing-inspect<1,>=0.4.0 in /usr/local/lib/python3.10/site-packages (from dataclasses-json<0.7,>=0.5.7->langchain-community) (0.9.0)

Requirement already satisfied: langchain-text-splitters<1.0.0,>=0.3.8 in ./local/lib/python3.10/site-packages (from langchain<1.0.0,>=0.3.25->langchain-community) (0.3.8)

Requirement already satisfied: pydantic<3.0.0,>=2.7.4 in ./local/lib/python3.10/site-packages (from langchain<1.0.0,>=0.3.25->langchain-community) (2.11.7)

Requirement already satisfied: jsonpatch<2.0,>=1.33 in /usr/local/lib/python3.10/site-packages (from langchain-core<1.0.0,>=0.3.65->langchain-community) (1.33)

Requirement already satisfied: packaging<25,>=23.2 in /usr/local/lib/python3.10/site-packages (from langchain-core<1.0.0,>=0.3.65->langchain-community) (23.2)

Requirement already satisfied: typing-extensions>=4.7 in ./local/lib/python3.10/site-packages (from langchain-core<1.0.0,>=0.3.65->langchain-community) (4.14.0)

Requirement already satisfied: httpx<1,>=0.23.0 in /usr/local/lib/python3.10/site-packages (from langsmith<0.4,>=0.1.125->langchain-community) (0.25.2)

Requirement already satisfied: orjson<4.0.0,>=3.9.14 in ./local/lib/python3.10/site-packages (from langsmith<0.4,>=0.1.125->langchain-community) (3.10.18)

Requirement already satisfied: requests-toolbelt<2.0.0,>=1.0.0 in ./local/lib/python3.10/site-packages (from langsmith<0.4,>=0.1.125->langchain-community) (1.0.0)

Requirement already satisfied: zstandard<0.24.0,>=0.23.0 in
./local/lib/python3.10/site-packages (from langsmith<0.4,>=0.1.125->langchain-
community) (0.23.0)

Requirement already satisfied: python-dotenv>=0.21.0 in
/usr/local/lib/python3.10/site-packages (from pydantic-
settings<3.0.0,>=2.4.0->langchain-community) (1.0.0)

Requirement already satisfied: typing-inspection>=0.4.0 in
./local/lib/python3.10/site-packages (from pydantic-
settings<3.0.0,>=2.4.0->langchain-community) (0.4.1)

Requirement already satisfied: charset-normalizer<4,>=2 in
/usr/local/lib/python3.10/site-packages (from requests<3,>=2->langchain-
community) (3.3.2)

Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/site-
packages (from requests<3,>=2->langchain-community) (3.6)

Requirement already satisfied: urllib3<3,>=1.21.1 in
/usr/local/lib/python3.10/site-packages (from requests<3,>=2->langchain-
community) (1.26.18)

Requirement already satisfied: certifi>=2017.4.17 in
/usr/local/lib/python3.10/site-packages (from requests<3,>=2->langchain-
community) (2023.11.17)

Requirement already satisfied: greenlet!=0.4.17 in
/usr/local/lib/python3.10/site-packages (from SQLAlchemy<3,>=1.4->langchain-
community) (1.1.2)

Requirement already satisfied: anyio in /usr/local/lib/python3.10/site-packages
(from httpx<1,>=0.23.0->langsmith<0.4,>=0.1.125->langchain-community) (3.7.1)

Requirement already satisfied: httpcore==1.* in /usr/local/lib/python3.10/site-
packages (from httpx<1,>=0.23.0->langsmith<0.4,>=0.1.125->langchain-community)
(1.0.2)

Requirement already satisfied: sniffio in /usr/local/lib/python3.10/site-
packages (from httpx<1,>=0.23.0->langsmith<0.4,>=0.1.125->langchain-community)
(1.3.0)

Requirement already satisfied: h11<0.15,>=0.13 in
/usr/local/lib/python3.10/site-packages (from
httpcore==1.*->httpx<1,>=0.23.0->langsmith<0.4,>=0.1.125->langchain-community)
(0.14.0)

Requirement already satisfied: jsonpointer>=1.9 in
/usr/local/lib/python3.10/site-packages (from jsonpatch<2.0,>=1.33->langchain-
core<1.0.0,>=0.3.65->langchain-community) (2.3)

Requirement already satisfied: annotated-types>=0.6.0 in
/usr/local/lib/python3.10/site-packages (from
pydantic<3.0.0,>=2.7.4->langchain<1.0.0,>=0.3.25->langchain-community) (0.6.0)

Requirement already satisfied: pydantic-core==2.33.2 in
./local/lib/python3.10/site-packages (from
pydantic<3.0.0,>=2.7.4->langchain<1.0.0,>=0.3.25->langchain-community) (2.33.2)

Requirement already satisfied: mypy-extensions>=0.3.0 in
/usr/local/lib/python3.10/site-packages (from typing-
inspect<1,>=0.4.0->dataclasses-json<0.7,>=0.5.7->langchain-community) (0.4.3)

Requirement already satisfied: exceptiongroup in /usr/local/lib/python3.10/site-

packages (from anyio->httpx<1,>=0.23.0->langsmith<0.4,>=0.1.125->langchain-community) (1.2.0)

Defaulting to user installation because normal site-packages is not writeable

Requirement already satisfied: tiktoken in ./local/lib/python3.10/site-packages (0.9.0)

Requirement already satisfied: regex>=2022.1.18 in /usr/local/lib/python3.10/site-packages (from tiktoken) (2023.10.3)

Requirement already satisfied: requests>=2.26.0 in /usr/local/lib/python3.10/site-packages (from tiktoken) (2.31.0)

Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/site-packages (from requests>=2.26.0->tiktoken) (3.3.2)

Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/site-packages (from requests>=2.26.0->tiktoken) (3.6)

Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/site-packages (from requests>=2.26.0->tiktoken) (1.26.18)

Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/site-packages (from requests>=2.26.0->tiktoken) (2023.11.17)

Defaulting to user installation because normal site-packages is not writeable

Requirement already satisfied: gradio in ./local/lib/python3.10/site-packages (5.34.1)

Requirement already satisfied: aiofiles<25.0,>=22.0 in /usr/local/lib/python3.10/site-packages (from gradio) (23.2.1)

Requirement already satisfied: anyio<5.0,>=3.0 in /usr/local/lib/python3.10/site-packages (from gradio) (3.7.1)

Requirement already satisfied: fastapi<1.0,>=0.115.2 in ./local/lib/python3.10/site-packages (from gradio) (0.115.13)

Requirement already satisfied: ffmpeg in /usr/local/lib/python3.10/site-packages (from gradio) (0.3.1)

Requirement already satisfied: gradio-client==1.10.3 in ./local/lib/python3.10/site-packages (from gradio) (1.10.3)

Requirement already satisfied: groovy~=0.1 in ./local/lib/python3.10/site-packages (from gradio) (0.1.2)

Requirement already satisfied: httpx>=0.24.1 in /usr/local/lib/python3.10/site-packages (from gradio) (0.25.2)

Requirement already satisfied: huggingface-hub>=0.28.1 in ./local/lib/python3.10/site-packages (from gradio) (0.33.0)

Requirement already satisfied: jinja2<4.0 in /usr/local/lib/python3.10/site-packages (from gradio) (3.1.2)

Requirement already satisfied: markupsafe<4.0,>=2.0 in /usr/local/lib/python3.10/site-packages (from gradio) (2.1.3)

Requirement already satisfied: numpy<3.0,>=1.0 in /usr/local/lib/python3.10/site-packages (from gradio) (1.26.2)

Requirement already satisfied: orjson~=3.0 in ./local/lib/python3.10/site-packages (from gradio) (3.10.18)

Requirement already satisfied: packaging in /usr/local/lib/python3.10/site-

packages (from gradio) (23.2)
 Requirement already satisfied: pandas<3.0,>=1.0 in
 /usr/local/lib/python3.10/site-packages (from gradio) (2.1.3)
 Requirement already satisfied: pillow<12.0,>=8.0 in
 /usr/local/lib/python3.10/site-packages (from gradio) (10.1.0)
 Requirement already satisfied: pydantic<2.12,>=2.0 in
 ./local/lib/python3.10/site-packages (from gradio) (2.11.7)
 Requirement already satisfied: pydub in /usr/local/lib/python3.10/site-packages
 (from gradio) (0.25.1)
 Requirement already satisfied: python-multipart>=0.0.18 in
 ./local/lib/python3.10/site-packages (from gradio) (0.0.20)
 Requirement already satisfied: pyyaml<7.0,>=5.0 in
 /usr/local/lib/python3.10/site-packages (from gradio) (6.0.1)
 Requirement already satisfied: ruff>=0.9.3 in ./local/lib/python3.10/site-
 packages (from gradio) (0.12.0)
 Requirement already satisfied: safehttpx<0.2.0,>=0.1.6 in
 ./local/lib/python3.10/site-packages (from gradio) (0.1.6)
 Requirement already satisfied: semantic-version~=2.0 in
 /usr/local/lib/python3.10/site-packages (from gradio) (2.10.0)
 Requirement already satisfied: starlette<1.0,>=0.40.0 in
 ./local/lib/python3.10/site-packages (from gradio) (0.46.2)
 Requirement already satisfied: tomlkit<0.14.0,>=0.12.0 in
 /usr/local/lib/python3.10/site-packages (from gradio) (0.12.0)
 Requirement already satisfied: typer<1.0,>=0.12 in ./local/lib/python3.10/site-
 packages (from gradio) (0.16.0)
 Requirement already satisfied: typing-extensions~=4.0 in
 ./local/lib/python3.10/site-packages (from gradio) (4.14.0)
 Requirement already satisfied: uvicorn>=0.14.0 in
 /usr/local/lib/python3.10/site-packages (from gradio) (0.24.0.post1)
 Requirement already satisfied: fsspec in /usr/local/lib/python3.10/site-packages
 (from gradio-client==1.10.3->gradio) (2023.10.0)
 Requirement already satisfied: websockets<16.0,>=10.0 in
 /usr/local/lib/python3.10/site-packages (from gradio-client==1.10.3->gradio)
 (11.0.3)
 Requirement already satisfied: idna>=2.8 in /usr/local/lib/python3.10/site-
 packages (from anyio<5.0,>=3.0->gradio) (3.6)
 Requirement already satisfied: sniffio>=1.1 in /usr/local/lib/python3.10/site-
 packages (from anyio<5.0,>=3.0->gradio) (1.3.0)
 Requirement already satisfied: exceptiongroup in /usr/local/lib/python3.10/site-
 packages (from anyio<5.0,>=3.0->gradio) (1.2.0)
 Requirement already satisfied: certifi in /usr/local/lib/python3.10/site-
 packages (from httpx>=0.24.1->gradio) (2023.11.17)
 Requirement already satisfied: httpcore==1.* in /usr/local/lib/python3.10/site-
 packages (from httpx>=0.24.1->gradio) (1.0.2)
 Requirement already satisfied: h11<0.15,>=0.13 in
 /usr/local/lib/python3.10/site-packages (from
 httpcore==1.*->httpx>=0.24.1->gradio) (0.14.0)
 Requirement already satisfied: filelock in /usr/local/lib/python3.10/site-

packages (from huggingface-hub>=0.28.1->gradio) (3.13.1)
 Requirement already satisfied: requests in /usr/local/lib/python3.10/site-
 packages (from huggingface-hub>=0.28.1->gradio) (2.31.0)
 Requirement already satisfied: tqdm>=4.42.1 in /usr/local/lib/python3.10/site-
 packages (from huggingface-hub>=0.28.1->gradio) (4.66.1)
 Requirement already satisfied: hf-xet<2.0.0,>=1.1.2 in
 ./local/lib/python3.10/site-packages (from huggingface-hub>=0.28.1->gradio)
 (1.1.4)
 Requirement already satisfied: python-dateutil>=2.8.2 in
 /usr/local/lib/python3.10/site-packages (from pandas<3.0,>=1.0->gradio) (2.8.2)
 Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/site-
 packages (from pandas<3.0,>=1.0->gradio) (2023.3.post1)
 Requirement already satisfied: tzdata>=2022.1 in /usr/local/lib/python3.10/site-
 packages (from pandas<3.0,>=1.0->gradio) (2023.3)
 Requirement already satisfied: annotated-types>=0.6.0 in
 /usr/local/lib/python3.10/site-packages (from pydantic<2.12,>=2.0->gradio)
 (0.6.0)
 Requirement already satisfied: pydantic-core==2.33.2 in
 ./local/lib/python3.10/site-packages (from pydantic<2.12,>=2.0->gradio)
 (2.33.2)
 Requirement already satisfied: typing-inspection>=0.4.0 in
 ./local/lib/python3.10/site-packages (from pydantic<2.12,>=2.0->gradio) (0.4.1)
 Requirement already satisfied: click>=8.0.0 in /usr/local/lib/python3.10/site-
 packages (from typer<1.0,>=0.12->gradio) (8.1.7)
 Requirement already satisfied: shellingham>=1.3.0 in
 /usr/local/lib/python3.10/site-packages (from typer<1.0,>=0.12->gradio) (1.5.4)
 Requirement already satisfied: rich>=10.11.0 in /usr/local/lib/python3.10/site-
 packages (from typer<1.0,>=0.12->gradio) (13.5.3)
 Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/site-
 packages (from python-dateutil>=2.8.2->pandas<3.0,>=1.0->gradio) (1.16.0)
 Requirement already satisfied: markdown-it-py>=2.2.0 in
 /usr/local/lib/python3.10/site-packages (from
 rich>=10.11.0->typer<1.0,>=0.12->gradio) (3.0.0)
 Requirement already satisfied: pygments<3.0.0,>=2.13.0 in
 /usr/local/lib/python3.10/site-packages (from
 rich>=10.11.0->typer<1.0,>=0.12->gradio) (2.16.1)
 Requirement already satisfied: charset-normalizer<4,>=2 in
 /usr/local/lib/python3.10/site-packages (from requests->huggingface-
 hub>=0.28.1->gradio) (3.3.2)
 Requirement already satisfied: urllib3<3,>=1.21.1 in
 /usr/local/lib/python3.10/site-packages (from requests->huggingface-
 hub>=0.28.1->gradio) (1.26.18)
 Requirement already satisfied: mdurl~=0.1 in /usr/local/lib/python3.10/site-
 packages (from markdown-it-py>=2.2.0->rich>=10.11.0->typer<1.0,>=0.12->gradio)
 (0.1.1)
 Defaulting to user installation because normal site-packages is not writeable
 Requirement already satisfied: langchain-openai in ./local/lib/python3.10/site-
 packages (0.3.24)

Requirement already satisfied: langchain-core<1.0.0,>=0.3.65 in
 ./local/lib/python3.10/site-packages (from langchain-openai) (0.3.65)

Requirement already satisfied: openai<2.0.0,>=1.86.0 in
 ./local/lib/python3.10/site-packages (from langchain-openai) (1.88.0)

Requirement already satisfied: tiktoken<1,>=0.7 in ./local/lib/python3.10/site-
 packages (from langchain-openai) (0.9.0)

Requirement already satisfied: langsmith<0.4,>=0.3.45 in
 ./local/lib/python3.10/site-packages (from langchain-
 core<1.0.0,>=0.3.65->langchain-openai) (0.3.45)

Requirement already satisfied: tenacity!=8.4.0,<10.0.0,>=8.1.0 in
 /usr/local/lib/python3.10/site-packages (from langchain-
 core<1.0.0,>=0.3.65->langchain-openai) (8.2.3)

Requirement already satisfied: jsonpatch<2.0,>=1.33 in
 /usr/local/lib/python3.10/site-packages (from langchain-
 core<1.0.0,>=0.3.65->langchain-openai) (1.33)

Requirement already satisfied: PyYAML>=5.3 in /usr/local/lib/python3.10/site-
 packages (from langchain-core<1.0.0,>=0.3.65->langchain-openai) (6.0.1)

Requirement already satisfied: packaging<25,>=23.2 in
 /usr/local/lib/python3.10/site-packages (from langchain-
 core<1.0.0,>=0.3.65->langchain-openai) (23.2)

Requirement already satisfied: typing-extensions>=4.7 in
 ./local/lib/python3.10/site-packages (from langchain-
 core<1.0.0,>=0.3.65->langchain-openai) (4.14.0)

Requirement already satisfied: pydantic>=2.7.4 in ./local/lib/python3.10/site-
 packages (from langchain-core<1.0.0,>=0.3.65->langchain-openai) (2.11.7)

Requirement already satisfied: anyio<5,>=3.5.0 in
 /usr/local/lib/python3.10/site-packages (from openai<2.0.0,>=1.86.0->langchain-
 openai) (3.7.1)

Requirement already satisfied: distro<2,>=1.7.0 in
 /usr/local/lib/python3.10/site-packages (from openai<2.0.0,>=1.86.0->langchain-
 openai) (1.7.0)

Requirement already satisfied: httpx<1,>=0.23.0 in
 /usr/local/lib/python3.10/site-packages (from openai<2.0.0,>=1.86.0->langchain-
 openai) (0.25.2)

Requirement already satisfied: jiter<1,>=0.4.0 in ./local/lib/python3.10/site-
 packages (from openai<2.0.0,>=1.86.0->langchain-openai) (0.10.0)

Requirement already satisfied: sniffio in /usr/local/lib/python3.10/site-
 packages (from openai<2.0.0,>=1.86.0->langchain-openai) (1.3.0)

Requirement already satisfied: tqdm>4 in /usr/local/lib/python3.10/site-packages
 (from openai<2.0.0,>=1.86.0->langchain-openai) (4.66.1)

Requirement already satisfied: regex>=2022.1.18 in
 /usr/local/lib/python3.10/site-packages (from tiktoken<1,>=0.7->langchain-
 openai) (2023.10.3)

Requirement already satisfied: requests>=2.26.0 in
 /usr/local/lib/python3.10/site-packages (from tiktoken<1,>=0.7->langchain-
 openai) (2.31.0)

Requirement already satisfied: idna>=2.8 in /usr/local/lib/python3.10/site-
 packages (from anyio<5,>=3.5.0->openai<2.0.0,>=1.86.0->langchain-openai) (3.6)

Requirement already satisfied: exceptiongroup in /usr/local/lib/python3.10/site-packages (from anyio<5,>=3.5.0->openai<2.0.0,>=1.86.0->langchain-openai) (1.2.0)

Requirement already satisfied: certifi in /usr/local/lib/python3.10/site-packages (from httpx<1,>=0.23.0->openai<2.0.0,>=1.86.0->langchain-openai) (2023.11.17)

Requirement already satisfied: httpcore==1.* in /usr/local/lib/python3.10/site-packages (from httpx<1,>=0.23.0->openai<2.0.0,>=1.86.0->langchain-openai) (1.0.2)

Requirement already satisfied: h11<0.15,>=0.13 in /usr/local/lib/python3.10/site-packages (from httpcore==1.*->httpx<1,>=0.23.0->openai<2.0.0,>=1.86.0->langchain-openai) (0.14.0)

Requirement already satisfied: jsonpointer>=1.9 in /usr/local/lib/python3.10/site-packages (from jsonpatch<2.0,>=1.33->langchain-core<1.0.0,>=0.3.65->langchain-openai) (2.3)

Requirement already satisfied: orjson<4.0.0,>=3.9.14 in ./local/lib/python3.10/site-packages (from langsmith<0.4,>=0.3.45->langchain-core<1.0.0,>=0.3.65->langchain-openai) (3.10.18)

Requirement already satisfied: requests-toolbelt<2.0.0,>=1.0.0 in ./local/lib/python3.10/site-packages (from langsmith<0.4,>=0.3.45->langchain-core<1.0.0,>=0.3.65->langchain-openai) (1.0.0)

Requirement already satisfied: zstandard<0.24.0,>=0.23.0 in ./local/lib/python3.10/site-packages (from langsmith<0.4,>=0.3.45->langchain-core<1.0.0,>=0.3.65->langchain-openai) (0.23.0)

Requirement already satisfied: annotated-types>=0.6.0 in /usr/local/lib/python3.10/site-packages (from pydantic>=2.7.4->langchain-core<1.0.0,>=0.3.65->langchain-openai) (0.6.0)

Requirement already satisfied: pydantic-core==2.33.2 in ./local/lib/python3.10/site-packages (from pydantic>=2.7.4->langchain-core<1.0.0,>=0.3.65->langchain-openai) (2.33.2)

Requirement already satisfied: typing-inspection>=0.4.0 in ./local/lib/python3.10/site-packages (from pydantic>=2.7.4->langchain-core<1.0.0,>=0.3.65->langchain-openai) (0.4.1)

Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/site-packages (from requests>=2.26.0->tiktoken<1,>=0.7->langchain-openai) (3.3.2)

Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/site-packages (from requests>=2.26.0->tiktoken<1,>=0.7->langchain-openai) (1.26.18)

```
[2]: from langchain.embeddings import OpenAIEmbeddings
      from langchain.text_splitter import RecursiveCharacterTextSplitter
      from langchain.llms import OpenAI
      from langchain.chains import VectorDBQA, RetrievalQA

      from langchain_openai import ChatOpenAI
      from langchain.document_loaders import TextLoader, PyPDFLoader
```



```

from langchain.vectorstores import FAISS
import openai
import os
import faiss

```

```

[3]: loader = PyPDFLoader('https://www.nestle.com/sites/default/files/asset-library/
↳documents/jobs/the_nestle_hr_policy_pdf_2012.pdf')
documents = loader.load()

```

```

[4]: # Splitting documents
text_splitter = RecursiveCharacterTextSplitter(chunk_size=1000, chunk_overlap=0)
texts = text_splitter.split_documents(documents)
os.environ["OPENAI_API_KEY"] = os.environ.get("OPENAI_API_KEY")

# Generating embeddings
embeddings = OpenAIEmbeddings()

# Using FAISS as the vector database
vectordb = FAISS.from_documents(texts, embeddings)

```

/tmp/ipykernel_325/4066231082.py:7: LangChainDeprecationWarning: The class `OpenAIEmbeddings` was deprecated in LangChain 0.0.9 and will be removed in 1.0. An updated version of the class exists in the :class:`~langchain-openai` package and should be used instead. To use it run `pip install -U :class:`~langchain-openai` and import as `from :class:`~langchain-openai import OpenAIEmbeddings``.

```

embeddings = OpenAIEmbeddings()

```

```

[5]: from langchain_openai import ChatOpenAI
from langchain.chains import RetrievalQA

qa = RetrievalQA.from_chain_type(
    llm=ChatOpenAI(model="gpt-3.5-turbo"),
    chain_type="stuff",
    retriever=vectordb.as_retriever()
)

```

```

[7]: from langchain import PromptTemplate

# Define the prompt template in English
template = """
I am a HR helpful assistant. Please answer the following question in English.
Question: {question}
Answer:
"""

# Create the PromptTemplate instance with the modified English template
prompt = PromptTemplate(

```

```

        input_variables=["question"],
        template=template,
    )

```

```

[8]: # Example usage
example_question = "What are the best practices for conducting interviews?"
formatted_prompt = prompt.format(question=example_question)

# Print the result to see the formatted prompt
print(formatted_prompt)

```

I am a HR helpful assistant. Please answer the following question in English.
 Question: What are the best practices for conducting interviews?
 Answer:

```

[9]: from langchain.chains import LLMChain # Import LLMChain
from langchain.chat_models import ChatOpenAI # Import ChatOpenAI

# Use ChatOpenAI for chat models instead of OpenAI
llm = ChatOpenAI(model_name="gpt-3.5-turbo", temperature=0.7)

# Create the LLMChain
llm_chain = prompt | llm

# Example usage
example_question = "What are the best practices for conducting interviews?"
response = llm_chain.invoke({"question": example_question})

# Print the result
print(response.content)

```

/tmp/ipykernel_325/380617891.py:5: LangChainDeprecationWarning: The class `ChatOpenAI` was deprecated in LangChain 0.0.10 and will be removed in 1.0. An updated version of the class exists in the :class:`~langchain-openai` package and should be used instead. To use it run `pip install -U :class:`~langchain-openai` and import as `from :class:`~langchain-openai import ChatOpenAI`.

```
llm = ChatOpenAI(model_name="gpt-3.5-turbo", temperature=0.7)
```

There are several best practices for conducting interviews, including:

1. Prepare in advance by reviewing the candidate's resume and job description.
2. Create a structured interview process with standardized questions for all candidates.
3. Make the candidate feel comfortable and welcome during the interview.
4. Actively listen to their responses and ask follow-up questions to gain a better understanding of their skills and experience.

5. Avoid asking discriminatory or illegal questions during the interview.
6. Take detailed notes during the interview to help with the evaluation process.
7. Provide the candidate with information about the company and the role, and allow them to ask questions.
8. Follow up with candidates in a timely manner after the interview to provide feedback and next steps.

Overall, the key to conducting successful interviews is to be well-prepared, respectful, and thorough in your evaluation of each candidate.

```
[16]: from langchain.chat_models import ChatOpenAI
      from langchain.prompts import PromptTemplate
      from langchain.chains import LLMChain

      # Test code
      prompt = PromptTemplate(
          input_variables=["question"],
          template="I am a helpful HR assistant. Answer in English. Question:␣
          ↳{question} Answer:",
      )

      llm = ChatOpenAI(model_name="gpt-3.5-turbo", temperature=0.7)
      llm_chain = LLMChain(prompt=prompt, llm=llm)

      # Test with a sample question
      response = llm_chain.run(question="What are the best practices for conducting␣
      ↳interviews?")
      print(f"Response: {response}")
```

Response: 1. Prepare thoroughly by reviewing the candidate's resume and the job description.

2. Create a structured interview format with a list of questions related to the job requirements.
3. Set a professional and welcoming tone for the interview.
4. Give the candidate time to ask questions and provide detailed information about the company and the position.
5. Use behavioral interview techniques to assess the candidate's past experiences and skills.
6. Take detailed notes during the interview to help with the evaluation process.
7. Avoid asking discriminatory or illegal questions.
8. Provide feedback to all candidates, whether they are successful or not.
9. Follow up with candidates in a timely manner regarding next steps in the hiring process.
10. Continuously seek feedback and improve your interviewing skills by learning from each interview experience.

```
[ ]: import os
import gradio as gr
from langchain.chat_models import ChatOpenAI
from langchain.prompts import PromptTemplate
from langchain.chains import LLMChain

# Set OpenAI API Key
#os.environ["OPENAI_API_KEY"] = "YOUR KEY"

# Define the prompt template
template = """
I am a helpful assistant. Please answer the following question in English.
Question: {question}
Answer:
"""

prompt = PromptTemplate(input_variables=["question"], template=template)

# Initialize ChatOpenAI and LLMChain
llm = ChatOpenAI(model_name="gpt-3.5-turbo", temperature=0.7)
llm_chain = LLMChain(prompt=prompt, llm=llm)

# Gradio bot function
def bot(history):
    try:
        # Ensure history is initialized
        if not history:
            history = []

        # Get the user's query
        query = history[-1][0] # Last user input
        # print(f"User query: {query}") # Debug log

        # Send the query to LangChain's LLMChain
        response = llm_chain.run(question=query)
        # print(f"LangChain response: {response}") # Debug log

        # Update chatbot history with the response
        history[-1] = (query, response)
        return history

    except Exception as e:
        # Log the error
        print(f"Error occurred: {e}")

        # Update chatbot history with an error message
        if history:
```

```

        history[-1] = (history[-1][0], "An error occurred. Please try again,
↪later.")
        return history or [("Error", "An unexpected error occurred. Please try,
↪again later.")]

# Gradio Interface
with gr.Blocks() as demo:
    chatbot = gr.Chatbot(value=[], label="Chat with LangChain")
    txt = gr.Textbox(show_label=False, placeholder="Type your question here...")

    txt.submit(
        lambda history, text: (history + [(text, None)], ""), # Append user
↪input
        [chatbot, txt],
        [chatbot, txt],
    ).then(bot, chatbot, chatbot)

demo.launch(debug=True, share=True)

```

/tmp/ipykernel_325/1023254239.py:52: UserWarning: You have not specified a value for the `type` parameter. Defaulting to the 'tuples' format for chatbot messages, but this is deprecated and will be removed in a future version of Gradio. Please set type='messages' instead, which uses openai-style dictionaries with 'role' and 'content' keys.

```
chatbot = gr.Chatbot(value=[], label="Chat with LangChain")
```

* Running on local URL: <http://127.0.0.1:7860>

* Running on public URL: <https://5d0d813b0760945e8e.gradio.live>

This share link expires in 1 week. For free permanent hosting and GPU upgrades, run `gradio deploy` from the terminal in the working directory to deploy to Hugging Face Spaces (<https://huggingface.co/spaces>)

<IPython.core.display.HTML object>

[]:

[]: