

RAG-Powered Real Estate Matching

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Let's Get Started →



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The Goal

Creating a Real Estate Agent to propose the best solution to property seekers.

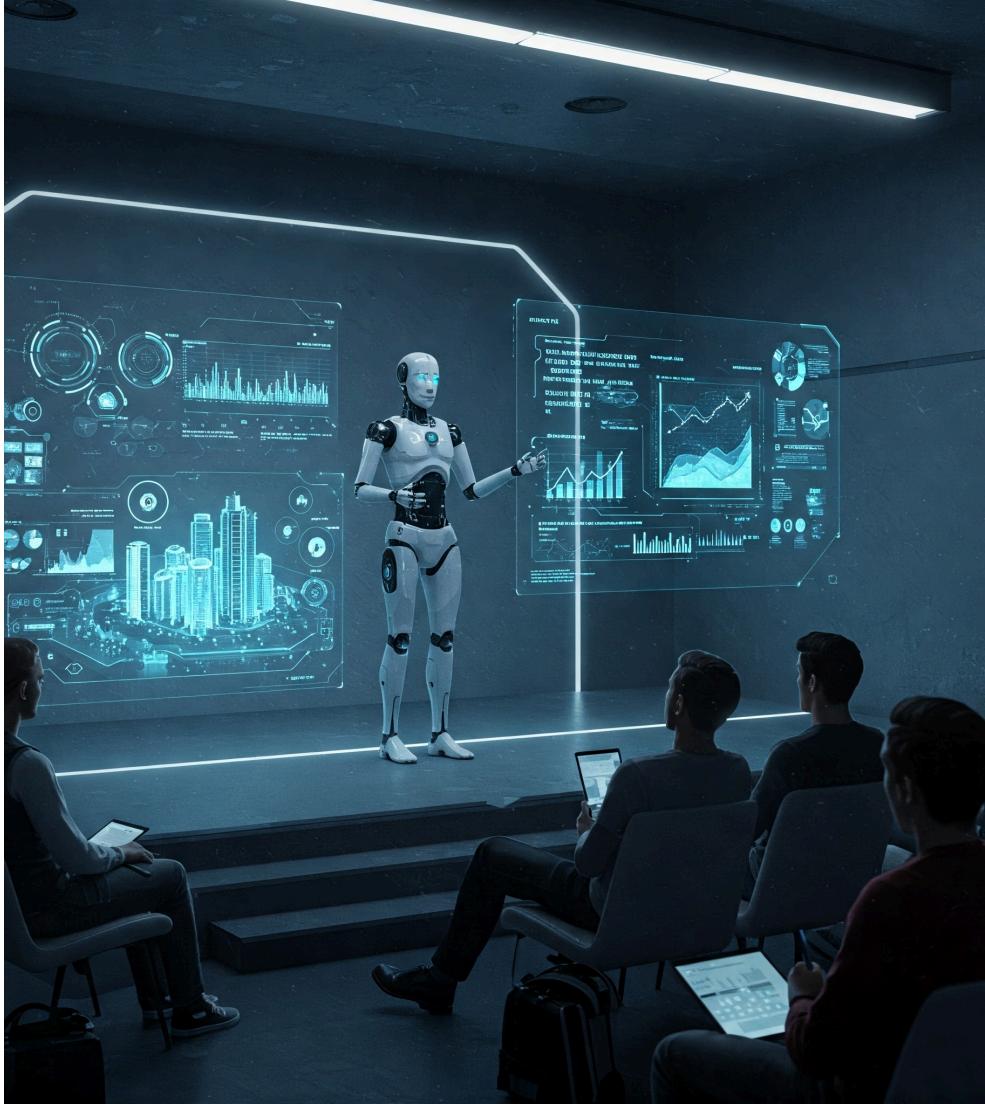
While understanding:

1. How to provide context to LLMs via API calls
2. How to setup a RAG as Real Estate Agent

By the end of the, we will have a recap with
Pros and Cons of each approach.

Code and Demo, will also be shared.

See the Code



LLM API Calls

Use code snippets and get the highlighting directly, and even types hover!

```
import os
from openai import OpenAI

client = OpenAI(
    # This is the default and can be omitted
    api_key=os.environ.get("OPENAI_API_KEY"),
)

chat_completion = client.chat.completions.create(
    messages=[
        {
            "role": "user",
            "content": "What is Python?",
        }
    ],
    model="gpt-4o-mini",
    temperature=0.3,
)

completed_message = chat_completion.choices[0].message
print(completed_message)
```

Improving API Calls

Lets add some context to our API calls!

Even simple API calls to LLMs can have interesting performance.

See an example:

```
1 # Step 3 - Query the LLM with better context
2 chat_completion = client.chat.completions.create(
3     messages=[
4         {
5             "role": "system",
6             "content": f"""You are a Python Developer. Very aware of the following:
7                         {system_must_have}
8                         """,
9         },
10        {"role": "user", "content": "Who are you and what can you do??"}
11    ],
12    model="gpt-4o-mini",
13    temperature=0.8,
14 )
15 )
```

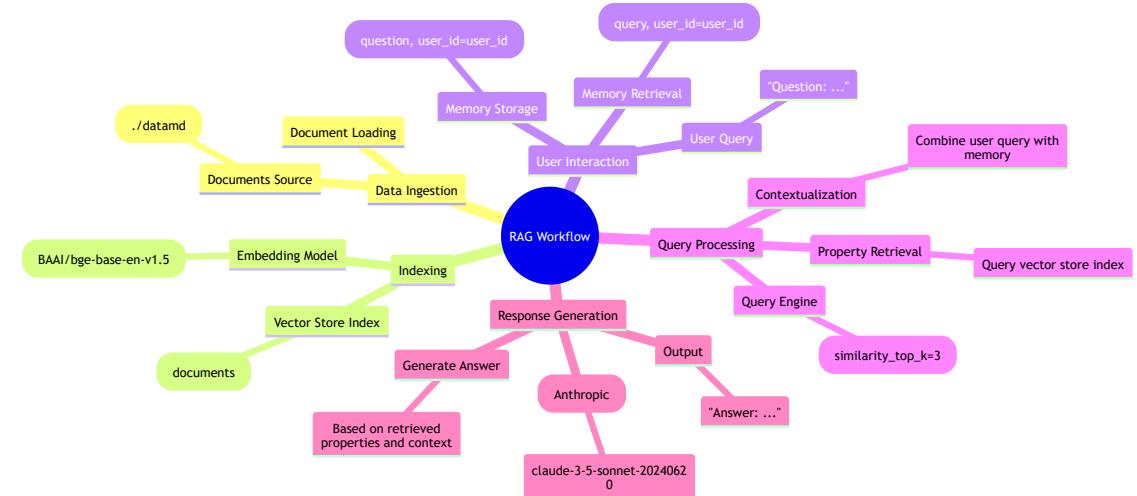
API Workflow

You can create diagrams / graphs from textual descriptions, directly in your Markdown.



RAG Concepts

You can create diagrams / graphs from textual descriptions, directly in your Markdown.



Implementing a RAG

See an example here [here](#)



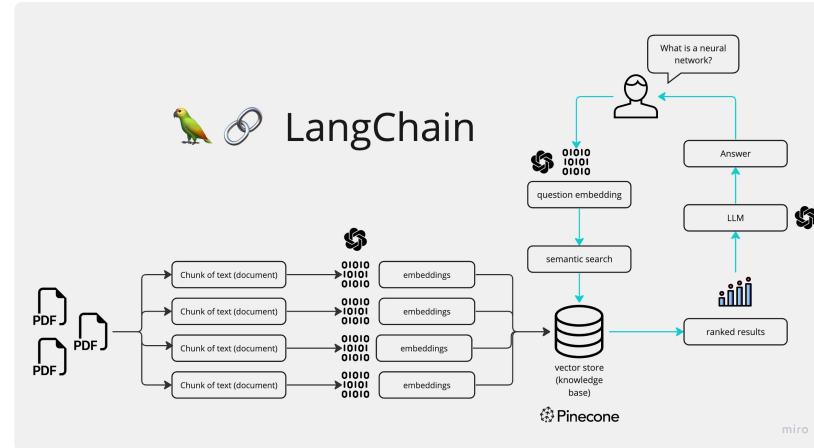
Do More with RAGs

RAGs can have many more use cases. From Chatting with a DB, to talk with PDF or CSV data.

Use RAG to chat with your DataBase



Use RAG to chat with PDFs



Read more about RAG use cases.

References

Get your API for LLMs:



1. OpenAI

- <https://openai.com/api/>
- <https://platform.openai.com/docs/models/#current-model-aliases>

2. Anthropic

- <https://console.anthropic.com/>
- <https://docs.anthropic.com/en/docs/about-claude/models/all-models>

Learn more on how to use Different LLMs with
Python

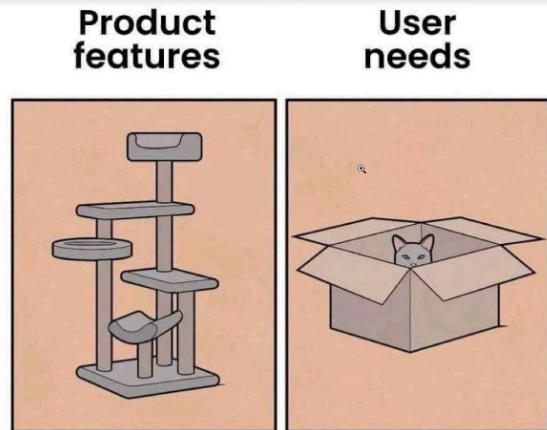
Wrapping Up

Feature	API Calls (Summary)	RAG with LlamaIndex
Speed/Efficiency	Fast, retrieves pre-summarized data.	Slower, requires retrieval and processing of documents.
Context/Detail	Limited context, concise summaries.	High context, detailed and nuanced responses.
Complexity of Queries	Handles simple, structured requests.	Handles complex, unstructured, and ad-hoc queries.

Conclusions

RAGs can have many more use cases. From Chatting with a DB, to talk with PDF or CSV data.

Use RAG to chat with your DataBase



Use RAG to chat with PDFs



Read more about RAG use cases.

Demo - Real Estate Agents

Demo Time!

QnA



Thanks

Learn More about Real Estate Powered RAG

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