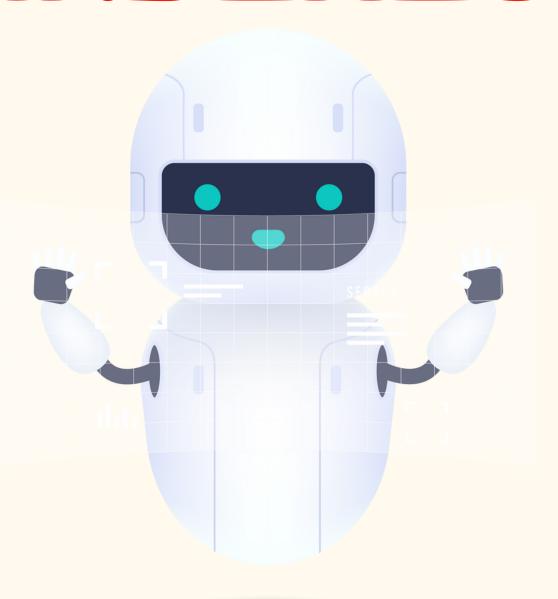
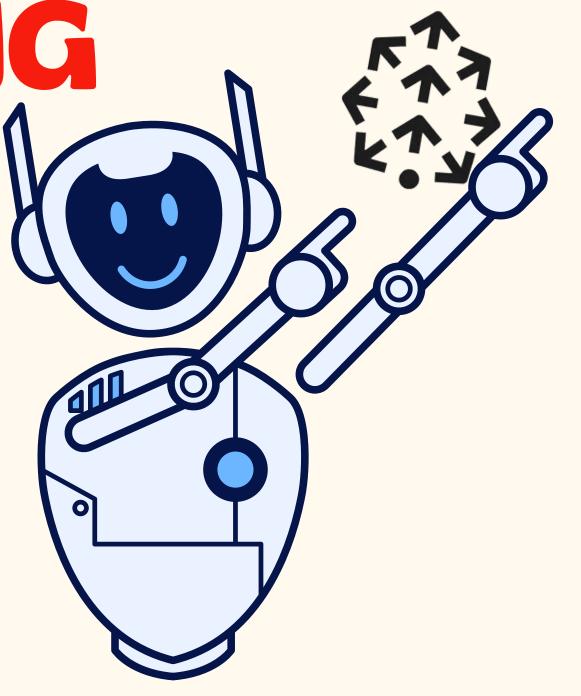
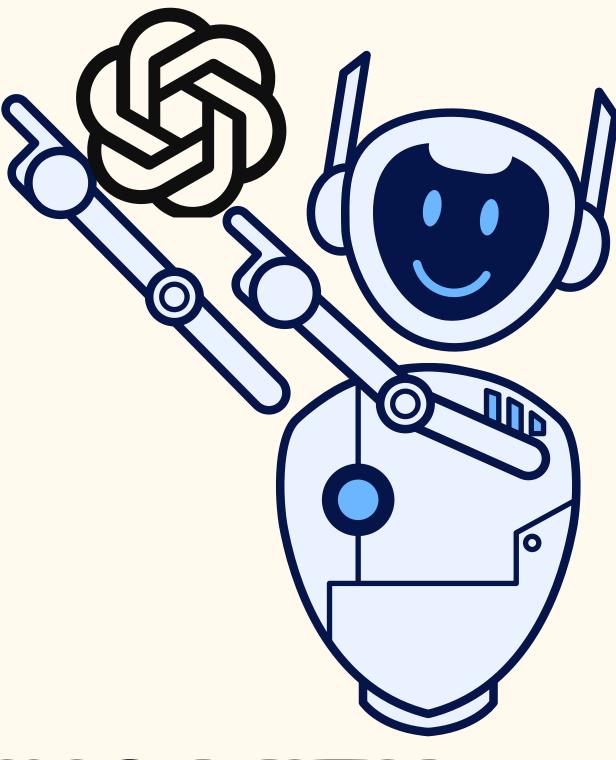
MASTERING PINECONE INDEXES







INTERACTING WITH PINECONE INDEXES DEMYSTIFIED

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PINECONE VECTORSTORES: PRIMER

CREATE EMBEDDINGS

```
IMPORT OPENAI
EMBED_MODEL = "TEXT-EMBEDDING-ADA-002"
RES = OPENAI.EMBEDDING.CREATE(
   INPUT=[
        "SAMPLE DOCUMENT TEXT GOES HERE",
        "THERE WILL BE SEVERAL PHRASES IN EACH BATCH"
    ], ENGINE=EMBED_MODEL
LEN(RES['DATA'][0]['EMBEDDING'])
CREATE PINECONE INDEX
IMPORT PINECONE
PINECONE.INIT(API_KEY = APIDATA['OPENAI']['PINE'],
ENVIRONMENT= APIDATA['OPENAI']['PINEVIR'])
PINECONE.CREATE_INDEX("TEST-INDEX", DIMENSION=1536)
```

WORK WITH PINECONE INDEX

```
RELOAD_CONE = PINECONE.INDEX("TEST-INDEX")

RELOAD_CONE.DESCRIBE_INDEX_STATS()

FETCH_ID1 = RELOAD_CONE.FETCH(['ID-997B'])

GET_MATCH = RELOAD_CONE.QUERY( VECTOR=[0.3 FOR X IN RANGE(0,1536)], TOP_K=3, INCLUDE_VALUES=TRUE )
```

WORK WITH PINECONE INDEX: IN LANGCHAIN

```
RELOAD_DOCS =
PINECONE.FROM_EXISTING_INDEX("TEST-INDEX",
EMBEDDING=EMBED)

RELOAD_DOCS.AS_RETRIEVER()
```

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PINECONE AS RETRIEVERQA CHAIN

LOAD EMBEDDINGS

```
FROM LANGCHAIN.EMBEDDINGS IMPORT OPENAIEMBEDDINGS
EMBED = OPENAIEMBEDDINGS()
```

LOAD FILE

```
UNSTRUCTURE_FILE =
UNSTRUCTUREDPDFLOADER("/CONTENT/TEST_PDF.PDF",MODE="ELEM
ENTS")
DATA_FILE = UNSTRUCTURE_FILE.LOAD()
```

CREATE INDEX + STORE

```
INDEX_NAME = 'TEST-INDEX'

IF INDEX_NAME NOT IN PINECONE.LIST_INDEXES():
        CREATE INDEX PINECONE.CREATE_INDEX( INDEX_NAME,

DIMENSION=1536, METRIC='COSINE' )

ELSE:
        THE ST
```

MAKE IT LANGCHAIN OBJECT

FROM LANGCHAIN. VECTORSTORES IMPORT PINECONE

TEST_CONE = PINECONE.FROM_DOCUMENTS(DOCUMENTS=DATA_FILE,

EMBEDDING=EMBED,INDEX_NAME=INDEX_NAME)

MAKE IT A RETRIEVAL CHAIN

```
TEST_RETRIEVER=RETRIEVALQA.FROM_CHAIN_TYPE(LLM=FACT_LLM, CHAIN_TYPE="STUFF", RETRIEVER=TEST_CONE.AS_RETRIEVER())

RELOAD_DOCS = 
PINECONE.FROM_EXISTING_INDEX("TEST-INDEX", EMBEDDING=EMBED)

RELOAD_DOCS.AS_RETRIEVER()
```

THE STEPS IN THE PROCESS CAN BE MODIFIED, AND ADDITIONAL ACTIVITIES CAN BE DONE. THE FINAL RESULT HAS TO BE THE RETRIVAL QA CHAIN.

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PRINT("INDEX ALEADY EXISTS")

LETS HEAD TO COLAB

NOW WE ARE TALKING!!! PRACTICE



THANKS FOR WATCHING

