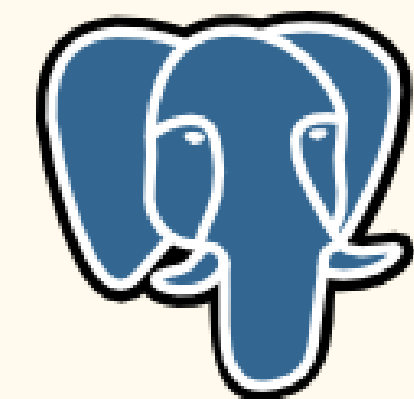


# LANGCHAIN VECTOR STORES SHOWDOWN

- CHROMADB
- FAISS
- PINCONE
- PGVECTOR



[HTTPS://GITHUB.COM/INSIGHTBUILDER](https://github.com/insightbuilder)

WHICH ONE  
REIGNS SUPREME?



# **VECTORSTORES ARE DATABASE**

- **LOOKING AT THEM AS DATABASES OPENS UP LLM TECH ACCESSIBLE TO EVERYONE**
- **CREATING VECTORS ARE COSTLY. KEEPING THEM IN RELIABLE DATABASE IS IMPORTANT**
- **READING DATA FROM VECTORSTORES HAS TO BE RELIABLE TOO.**
- **BETTER IF THE DATABASE IS OPENSOURCE AND ACCESSIBLE**



## FAISS

```
FAISS_DB = FAISS.FROM_DOCUMENTS(DOCS,  
EMBEDDINGS)  
DB.SAVE_LOCAL("FAISS_INDEX")
```

```
NEW_DB =  
FAISS.LOAD_LOCAL("FAISS_INDEX",  
EMBEDDINGS)
```

## PGVECTOR

```
PG_DB = PGVECTOR.FROM_DOCUMENTS(  
    EMBEDDING=EMBEDDINGS,  
    DOCUMENTS=DOCS,  
    COLLECTION_NAME="TEST_DB",  
    CONNECTION_STRING=CONNECTION_STRING)
```

```
NEW_DB =  
PGVECTOR(COLLECTION_NAME='TEST_DB',  
    EMBEDDING_FUNCTION=OPENAIEMBEDDINGS(),  
    CONNECTION_STRING=CONNECTION_STRING)
```

## CHROMA

```
VECTORDB =  
CHROMA.FROM_DOCUMENTS(DOCUMENTS=DOCS,  
    EMBEDDING=EMBEDDING,  
    PERSIST_DIRECTORY='NEW_DB_CHROMA')
```

```
NEW_VECTORDB =  
CHROMA(PERSIST_DIRECTORY='NEW_DB',  
    EMBEDDING_FUNCTION=EMBEDDING)
```

## PINECONE

```
INDEX_NAME = "TEST-INDEX"
```

```
DOCSEARCH =  
PINECONE.FROM_DOCUMENTS(DOCS,  
    EMBEDDINGS, INDEX_NAME=INDEX_NAME)
```

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

## FAISS

PIP INSTALL FAISS-CPU

THE DATA IS LOCAL. WORKS  
WELL IN PRODUCTION.

**ALREADY TESTED.**

## PGVECTOR

POSTGRES IS UBIQUITOUS. LOADING  
ONE ON LINUX IS SIMPLE. DATA IS  
LOCAL.

## CHROMA

PIP INSTALL CHROMADB

THIS CAN CREATE LOT OF ISSUES. AS THIS  
WILL REQUIRE TORCH, SENTENCE-  
TRANSFORMERS AND RELATED LIBRARIES

AFTER THAT LOADING LOCAL DATABASE IS  
THROWING ERROR WHEN QUERIED WITH LC

## PINECONE

TESTED, AND ITS OKAY. THE DATA IS NOT  
LOCAL. HAVE NOT TRIED PINECONE DOCKER  
OPTION. PROBABLY A BETTER ALTERNATIVE

THE PYTHON LIBRARIES CAN AUTOMATE THE  
EXPORT AND IMPORTS.

# LETS HEAD TO COLAB

**NOW WE ARE TALKING!!! PRACTICE**

insightbuilder/  
**python\_de\_learners\_data**



Repo contains the code, data and supporting documents including presentations, playbooks and additional documents to support learning

 2  
Contributors

 0  
Issues

 7  
Stars

 3  
Forks



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**python\_de\_learners\_data/pgVectors\_showdown.ipynb at main · insightbuilder/python\_de\_learners\_data**

Repo contains the code, data and supporting documents including presentations, playbooks and additional documents to support learning -  
python\_de\_learners\_data/pgVectors\_showdown.ipynb at main · in...

 GitHub

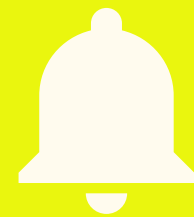
# THANKS FOR WATCHING



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