



**AUTOMATING DIVERSE
FILE EMBEDDING IN
LANGCHAIN**

**IMPLEMENTING
INCREMENTAL
VECTOR STORAGE
IN FAISS**



THE GOALS

- **EMBED TEXT, PDF, CSV, EXCEL, CODE, IPYNB FILES**
- **INCREMENTALLY LOAD THE EMBED VECTORS INTO FAISS INDEX**



STEPS TO ACHIEVE



**REALIZE DATA
IS STORED AS
TEXT**

**LEARN HOW
FILE LOADERS
WORK**

**EXTRACT
TEXT AND
THEN SPLIT
THEM**

**FEED THEM TO
EMBED
FUNCTIONS**

**INDEX IS A DS
TO WHICH NEW
DATA CAN BE
APPENDED**

**MODULARIZE
THE CODE INTO
FUNCTIONS**

**WRITE A SIMPLE
TEST FUNCTION
TO CHECK
INGESTION**

**SEARCH THE
VECTOR STORE
& VERIFY**

FLOW CHART



**EXTRACT
THE FILE
DATA TO
TEXT**



**SPLIT THE
FILE DATA
USING
SPLITTER**



**EMBED THE
SPLIT DATA
INTO
VECTORS**



**IF INDEX
EXISTS THEN
MERGE THE
NEW VECTORS**

FAISS : FACEBOOK AI SIMILARITY SEARCH

OTHER INDEXES

CHROMADB

PGVECTOR

QDRANT

ANNOY



TIME TO CODE

EACH OF THE FILE TYPES WILL
POSE UNIQUE CHALLENGES
WHEN IT IS GETTING EMBEDDED
AND LATER RETRIEVED FROM
THE INDEX. LETS LEARN THEM



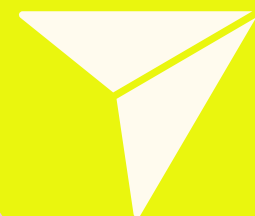
THANKS FOR WATCHING

PRACTICE

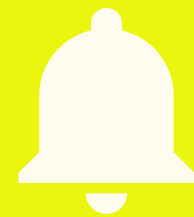
PRACTICE



LIKE



SHARE



SUBSCRIBE

PRACTICE

PRACTICE