**Embeddings and Their Role in Generative AI.**

* Embeddings are basically numerical or mathematical representation of data. The data could be a text, image, video, etc.
* It is represented in the form of vectors.
* It is the numerical representation of data , so that it can undergo computations.
* The role of embeddings in GenAI is basically to represent text in the form of vectors. Text Embeddings are widely used in GenAI (LLM) usecase (unless it is an image generation or..etc).
* Mostly Sentence embeddings, an entire sentence will be represented as a vector while dealing with huge texts.
* Embedding models are used to create embeddings for the text. There are various state of the art embedding models available to us open source like Hugging Face, Databricks marketplace, Ollama (run it locally) etc.
* One of the embedding model can be used to generate embedding and these embeddings are further used to get the desired results from GenAI models