Roadmap to Learn Natural Language Processing

Google : <u>Image Search</u>
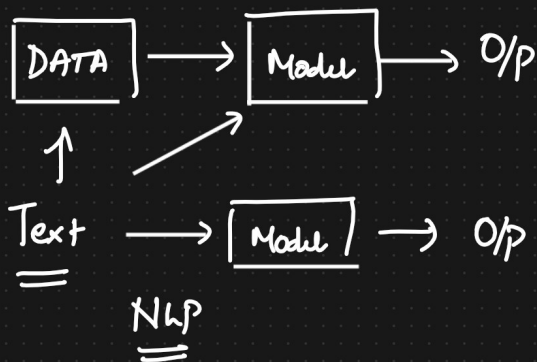
Cat eating food → [cat image]

Text → Image

① Text
② Audio
③ Video → <u>Audio</u>

DATA → Model → O/p

↑ ↗

<u>Text</u> → Model → O/p

<u>NLP</u>

<u>Usecase</u> : Chatbot, Sentiment Analysis, Text Classification

Alexa,

<u>Text</u> → Vectors → Model → O/p

Text Preprocessing | Numerical format
{Word Embedding}
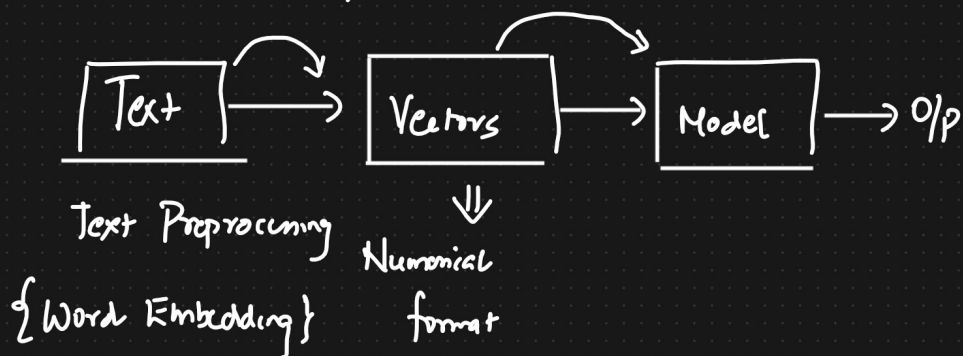
Roadmap of NLP → Machine Learning
                    → Deep Learning

BERT

Transformers
} Hugging Face

RNN, LSTM RNN, Encoders, Attention

Tensorflow, PyTORCH

Level 6 → Embedding Layers → word2vec

Level 5 Get Understanding of ANN, Loss, Optimizer

NLTR, SPACY

Level 4 Solve ML Usecases

Level 3 Text Preprocessing → Word2vec, Gensim, CBOW, SKIPGRAM

Level 2 Text Preprocessing → Bag of Words, OHE, TFIDF, Unigram, Ngrams

Level 1 Text Preprocessing → Tokenization, Lemmatization, Stop Words, Stemming