

# NLP

- Everything we express (either verbally or in written) carries huge amounts of information. The topic we choose, our tone, our selection of words, everything adds some type of information that can be interpreted and value extracted from it. In theory, we can understand and even predict human behaviour using that information.
- But there is a problem: one person may generate hundreds or thousands of words in a declaration, each sentence with its corresponding complexity. If you want to scale and analyze several hundreds, thousands or millions of people or declarations in a given geography, then the situation is unmanageable.
- Natural Language Processing or NLP is a field of Artificial Intelligence that gives the machines the ability to read, understand and derive meaning from human languages.

## Important Things In NLP

### Text Data Preprocess

1. Tokenization
2. Stemming And Lemmatization
3. Stop Words

### Text Data Vectorization

3. Bag\_Of\_Words(Count Vectorizer)
4. TF-IDF
5. Unigram,BiGram,n-Gram
6. Word2vec and Average Word2vec

## Appllication:

1. Chatbots
2. Text Classification
3. Sentiment Analysis
4. Machine Translation