

- **NLP** stands for **Natural Language Processing**: the application of computational techniques to the analysis and synthesis of natural language and speech.
- It's the use of different techniques from computer science to **understand** and **manipulate** human language and speech.
- Our focus here is on **analyzing text data**. This can be anything: from speeches, conversations, online reviews, tweets, written documents, etc.

- The main challenge of NLP is **ambiguity**.
- This is largely due to **polysemy** and **homonymy**: Words that may seem unique can have different meanings depending on the context in which they are being evaluated.
 - Polysemy: "face" can mean the front of your head or confronting something.
 - Homonymy: "lie" can mean an untrue statement or a resting position.
- We can have words with different meanings in the same sentence **depending** on the way we interpret these words.
- This happens because of the difference between **signifier** (the way we represent the information, word) and **signified** (the meaning of that information, concept).

