

Natural Language Processing (NLP): Basics and Applications

Natural Language Processing (NLP) involves the interaction between computers and human language.

Tasks include language translation, sentiment analysis, and text summarization. Key concepts:

1. Tokenization: Splitting text into words or phrases.
2. Lemmatization: Reducing words to their base forms.
3. Word embeddings: Representing words as vectors (e.g., Word2Vec).

Applications include chatbots, voice assistants, and automated text analysis.