Natural Language Processing (NLP) Applications

NLP enables machines to understand and interact using human language. Applications span chatbots, machine translation, sentiment analysis, and question answering.

Diagram:

[NLP System] -> [Text Input] -> [Preprocessing] -> [Modeling] -> [Output]

Key Techniques:

- Tokenization, Lemmatization

- Named Entity Recognition (NER)

- Part-of-Speech (POS) Tagging

- Transformer Models (e.g., BERT, GPT)