

Information Extraction and Sentiment Analysis

Information Extraction and Named Entity Recognition

Information Extraction (IE):

- Gathers structured data from unstructured text.

Named Entity Recognition (NER):

- Identifies persons, locations, organizations, dates.

Evaluation:

- Precision, Recall, F1 Score
- Sequence models like CRFs.

Sentiment Analysis

Classifies text by expressed sentiment (positive, negative, neutral).

Applications:

- Product reviews
- Public opinion tracking
- Financial predictions

Methods:

- Lexicon-based
- Machine learning-based (Naïve Bayes, SVM)
- Deep learning approaches

Challenges:

- Handling negation
- Sarcasm detection
- Aspect-based sentiment analysis