

Sentiment Analysis

Natural Language Understanding Lab

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Objectives

- Understanding:
 - Sentiment Analysis Tasks
 - Supervised Sentiment Analysis
 - Lexicon-based Sentiment Analysis
 - Aspect-based Sentiment Analysis
- Learning how to:
 - Perform supervised polarity classification
 - Use polarity/subjectivity lexicons for polarity and subjectivity detection
 - Use negation and valence shifter in sentiment analysis
 - Use dependency parsing for simple aspect extraction

Outline

- ① Sentiment Analysis Tasks
 - Polarity Classification
 - Subjectivity/Objectivity Identification
 - Feature/Aspect-based Sentiment Analysis
- ② Polarity Classification using Supervised Machine Learning
 - Polarity Classification on Movie Reviews
 - *Exercises*: 20 min
- ③ Lexicon-Based Sentiment Analysis with NLTK
 - Sentiment Analysis with SentiWordNet
 - From Scores to Labels
 - VADER Approach
 - *Exercises*: 20 min
- ④ Aspect-Based Sentiment Analysis using Dependency Parsing
- ⑤ *Exercises*: 30 min

Recommended Reading

- Dan Jurafsky and James H. Martin. Speech and Language Processing (3rd ed. draft)
 - Chapter 20: Lexicons for Sentiment, Affect, and Connotation