

Predictive Text Mining

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Predictive Text Mining Text Categorization

Given pre-defined categories and some training examples, automatically assign documents to categories

Applications

- Sentiment classification
- News topic classification
- Genre classification

Naïve Bayes and SVMs algorithms

Sentiment Analysis

Sentiment Analysis with Python NLTK Text Classification

This is a demonstration of **sentiment analysis** using a NLTK 2.0.4 powered **text classification** process. It can tell you whether it thinks the text you enter below expresses **positive sentiment**, **negative sentiment**, or if it's **neutral**. Using **hierarchical classification**, *neutrality* is determined first, and *sentiment polarity* is determined second, but only if the text is not neutral.

Analyze Sentiment

Language

english \$

In many ways visually stunning, but I cannot for my life believe the many raving reviews. They are simply not credible.

Enter up to 50000 characters

Analyze

Sentiment Analysis Results

The text is pos.

The final sentiment is determined by looking at the classification probabilities below.

Subjectivity

- neutral: 0.2
- polar: 0.8

Polarity

- pos: 0.6
- neg: 0.4

What to Categorize?

Topics

 Categorize news articles to pre-defined topic categories: politics, finance, sports, science

Genres, styles, authors

Or just anything you can define with training examples

- Quality of writing
- Readability
- Ideology

Annotating Training Examples

Example: sentiment annotation

- Positive, negative, neutral
- Or more granularity

Quality of annotations