**Chapter 9**

**Appendix**

Sentiment Analysis

Sentiment Analysis aims to determine the attitude of a speaker or a writer with respect to some topic or the overall contextual polarity of a document. The attitude may be his or her judgment or evaluation, affective state (that is to say, the emotional state of the author when writing), or the intended emotional communication (that is to say, the emotional effect the author wishes to have on the reader).

Machine Learning

Machine learning is a [scientific discipline](http://en.wikipedia.org/wiki/Academic_disciplines) that explores the construction and study of [algorithms](http://en.wikipedia.org/wiki/Algorithm) that can [learn](http://en.wikipedia.org/wiki/Learning) from data. Such algorithms operate by building a [model](http://en.wikipedia.org/wiki/Mathematical_model) from example inputs and using that to make predictions or decisions, rather than following strictly static program instructions. Machine learning is closely related to and often overlaps with [computational statistics](http://en.wikipedia.org/wiki/Computational_statistics); a discipline that also specializes in prediction-making.

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| --- | --- |
| NLP | Natural Language Processing isconcerned with the interactions between [computers](http://en.wikipedia.org/wiki/Computer) and[human (natural) languages](http://en.wikipedia.org/wiki/Natural_language). As such, NLP is related to the area of [human–computer interaction](http://en.wikipedia.org/wiki/Human%E2%80%93computer_interaction) and helps in understanding the languages and their meanings. |
| NLTK | Natural Language Toolkit is a suite of libraries and programs for symbolic and statistical natural language processing (NLP) for the Python programming language. NLTK includes graphical demonstrations and sample data. |
| Feature Vector | Feature Vector is an n-dimensional vector of numerical features that represent some object. Many algorithms in machine learning require a numerical representation of objects, since such representations facilitate processing and statistical analysis. |
| OAuth | OAuth provides client applications a 'secure delegated access' to server resources on behalf of a resource owner. It specifies a process for resource owners to authorize third-party access to their server resources without sharing their credentials |
| Twitter REST API | The REST APIs provide programmatic access to read and write Twitter data. Author a new Tweet, read author profile and follower data, and more. The REST API identifies Twitter applications and users using OAuth; responses are available in JSON. |
| Naive Bayes Classifier | Naive Bayes Classifier is a family of simple probabilistic classifiers based on applying Bayes' theorem with strong (naive) independence assumptions between the features. |

**Table 2: Information on Keywords**