Comparative Evaluation of Supervised Learning Algorithms for Sentiment Analysis of Movie Reviews

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Abstract

Online forums and social networking websites provide users with a platform for expressing their opinions. Manually evaluating these reviews for crucial analytical information is cumbersome. Sentiment analysis deals with analyzing such massively available textual data and determining its polarity. This research paper provides a comparative study of multiple well-known supervised machine learning algorithms on three standard datasets confined to the domain of movie reviews. The study is supported by illustrative plots and experimental results. The research work can be used as a base for further exploration in predicting the sentiment value of textual data in alternate domains using advanced machine learning algorithms.

References

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Unsupervised Semantic Orientation Approaches for Sentiment Analysis of Textual Reviews", 2012 IEEE International Conference on Computational Intelligence and Computing Research.


Index Terms

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Keywords

Sentiment Analysis, Machine Learning, Text classification, Naïve Bayes, Support Vector Machine, Maximum Entropy, Classification and Regression Trees, Random Forest, movie reviews.