

REVIEW ANALYSIS USING SPARSE VECTOR AND DEEP NEURAL NETWORK

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ABSTRACT

In the modern world of social networks, sentiment analysis has become one of the most important research topics in the field of deep learning. The Sentiment Analysis is the name of the problem that with a sentence or text the machine gets capable to analyze and predict with the maximum precision possible. The sentiment that will be obtained by a person when reads it or the contextual opinion related to something. In this project, we are implementing deep neural network and sparse vector algorithm to implement sentiment analysis. The above algorithm can perform high data analysis and gives enhanced accuracy of sentiments implemented. The approach can reduce the training time of the neural network model through a regional embedding. At the same time, sparse vector algorithm uses a sentence to extract sentiment features of the whole sentence and controls the transmission of information through different weight matrices, which can effectively infer the sentiment polarities of different targets in the same sentence. Finally, experimental results of data show that our approach yields better performance than SVM and several other neural network models. Experiments on different data and different domains show that the proposed method can solve the high dimensional problem with good performance and in various review units.

KEYWORDS: *Machine Learning, Deep Neural Network, Embedding, Sentiment Analysis, Sparse Vector Algorithm*

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