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| Title | A long short-term memory (LSTM) model for business sentiment analysis based on recurrent neural network | | |
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| Abstract |  |
| Business sentiment analysis (BSA) is one of the significant and popular topics of natural language processing. It is one kind of sentiment analysis techniques for business purpose. Different categories of sentiment analysis techniques like lexicon-based techniques and different types of machine learning algorithms are applied for sentiment analysis on different languages like English, Hindi, Spanish, etc. In this paper, long short-term memory (LSTM) is applied for business sentiment analysis, where recurrent neural network is used. LSTM model is used in a modified approach to prevent the vanishing gradient problem rather than applying the conventional recurrent neural network (RNN). To apply the modified RNN model, product review dataset is used. In this experiment, 70% of the data is trained for the LSTM and the rest 30% of the data is used for testing. The result of this modified RNN model is compared with other conventional RNN models and a comparison is made among the results. It is noted that the proposed model performs better than the other conventional RNN models. Here, the proposed model, i.e., modified RNN model approach has achieved around 91.33% of accuracy. By applying this model, any business company or e-commerce business site can identify the feedback from their customers about different types of product that customers like or dislike. Based on the customer reviews, a business company or e-commerce platform can evaluate its marketing strategy. | |