PROJECT REPORT

HYBRID CNN AND RNNS MODEL FOR SENTIMENT ANALYSIS

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ABSTRACT

In the realm of sentiment analysis, understanding public opinion and customer feedback is of paramount importance. This study researches into the performance of a hybrid model that fuses Convolutional Neural Networks (CNNs) and Recurrent Neural Networks (RNNs) for sentiment analysis, considering various datasets. The findings consistently highlight the remarkable enhancement in sentiment classification accuracy achieved by the hybrid model in comparison to basic models, owing to its ability to capture complex data patterns. While the hybrid models tend to require slightly more training time, the trade-off between accuracy and training time remains manageable. Furthermore, the hybrid models outperform basic models across datasets.

Keyword: sentiment analysis, LSTM, GRU, CNN, accuracy