

intrinsic structure is particularly compatible with polynomial decision limits. It is evident that careful consideration of the model and kernel choices utilized plays an important role in maximizing classification performance, where both deep learning and traditional machine learning methods demonstrate effectiveness based on task-specific needs. The results from all the experiments agree that for both data sets the model and kernel choices used have a significant effect on maximizing the classification performance. Repeating this experiment, with an emphasis on maximizing classification performance through model/kernel choice, using additional classification methods could yield even better performance.

IV. CONCLUSION

This study conducted sentiment analysis using CNN and SVM models with different kernels on tweets that support the McDonald's boycott in Indonesia. CNN achieved the highest performance with an accuracy of 94.40% and F1-score of 94.94%, followed closely by SVM with polynomial kernel which gave an accuracy of 93.75% and F1-score of 94.00%. These findings highlight CNN's superior ability to extract hierarchical features for sentiment classification, while the polynomial kernel SVM demonstrated strong capability in handling non-linear relationships in the text data. The RBF kernel performed moderately well, while the Linear kernel struggled to handle the complexity of the dataset.

Thanks to robust preprocessing steps like tokenization, stopword removal, and stemming procedures, the model was provided with relatively clean and consistent input data. Having balanced dataset by removing neutral class is another reason of SVM as well as CNN model's power to learn models.

For future research, addressing the limitations of these models in handling more diverse datasets, such as those including neutral sentiments, would be beneficial. Furthermore, by using advanced methods such as attention mechanisms or models based on Transformers similar to BERT we could lift things a bit more. Adding demographic or contextual features and trying the method in other social media sites will help us gain more comprehensive insights. These attempts to refine sentiment analysis techniques and provide a deeper understanding of public opinion in various settings.

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