Abstract

The election of legislative members is a significant moment in the perspective of democracy, influencing the policies and direction of a country. In the digital era, sentiment analysis regarding the election of legislative members through social media has become increasingly important for analyzing public opinions and providing insights into how people respond to and feel about candidates, parties, or specific issues. In this study, the authors approach sentiment analysis related to the election of legislative members using deep learning algorithms with Long Short Term Memory (LSTM) and Convolutional Neural Network (CNN) models, which are developed and trained using pre-processed datasets. The results of this study indicate that deep learning methods can provide valuable insights into public sentiment during the 2024 legislative elections. The proposed model was able to classify and identify sentiment with the highest testing accuracy achieved using the CNN model with an 80:20 data ratio. It is evident that the data ratio has a significant impact on the model's performance, providing the optimal balance between training and testing data. Consequently, the CNN model achieved the best results with an accuracy of 93.27%, F1-score of 93.19%, precision of 93.52%, and recall of 92.73%.

Keywords : sentiment analysis, legislative elections, DPR, LSTM, CNN