

ABSTRAK

Pemilihan Presiden 2024 adalah bagian dari sistem demokrasi yang bertujuan untuk menetapkan kepala negara periode 2024-2029. Pemilihan berlangsung hari Rabu, 14 Februari 2024. Pemilihan Presiden di Indonesia selalu menarik perhatian publik dan media, dengan berbagai pandangan, komentar, dan kritik terhadap calon presiden muncul di berbagai platform, termasuk media sosial. Media sosial digunakan untuk komunikasi dan akses informasi, termasuk komentar, kritik, dan opini. Twitter adalah platform yang sering digunakan masyarakat Indonesia untuk menyampaikan pandangan mereka tentang calon presiden, baik pandangan positif maupun negatif. Pada penelitian ini, menerapkan klasifikasi sentimen untuk memberikan gambaran yang lebih jelas tentang pandangan masyarakat terhadap calon presiden. Dan menerapkan beberapa tahapan seperti preprocessing, pelabelan, pembobotan menggunakan TF-IDF, klasifikasi sentimen menggunakan Long Short-Term Memory (LSTM), serta hyperparameter tuning untuk mencari nilai parameter terbaik. Klasifikasi sentimen dengan LSTM menghasilkan nilai Akurasi 96% pada Capres Anies, 97% Capres Prabowo dan 97% Capres Ganjar. Untuk penerapan hyperparameter tuning terbaik pada Capres Anies menghasilkan nilai embedding terbaiknya 128, units 32, dense_units 1, batch_size 16 dan epochs 10. Nilai hyperparameter terbaik Capres Prabowo menghasilkan nilai embedding terbaiknya 128, units 64, dense_units 1, batch_size 32 dan epochs 20. Nilai hyperparameter terbaik Capres Ganjar nilai embedding terbaiknya 128, units 32, dense_units 1, batch_size 32 dan epochs 10.

Kata kunci: Klasifikasi Sentimen, Twitter, LSTM, Hyperparameter Tuning

ABSTRACT

The 2024 Presidential Election is part of a democratic system that aims to determine the head of state for the period 2024-2029. The election takes place on Wed, February 14, 2024. Presidential elections in Indonesia always attract the attention of the public and the media, with various views, comments, and criticisms of the presidential candidates appearing on various platforms, including social media. presidential candidates appearing on various platforms, including social media. Social media is used for communication and access to information, including comments, criticisms and opinions. opinions. Twitter is a platform that Indonesians often use to express their views on presidential candidates, both positive and negative. and negative views. In this research, sentiment classification is applied to provide a clearer picture of people's views on presidential candidates. And apply several stages such as preprocessing, labeling, weighting using TF-IDF, sentiment classification using Long Short-Term Memory (LSTM), and hyperparameter tuning. Long Short-Term Memory (LSTM), and hyperparameter tuning to find the best parameter values. the best parameter values. Sentiment classification with LSTM produces 96% accuracy on Anies presidential candidate, 97% Prabowo presidential candidate and 97% Ganjar presidential candidate. For the application of the best hyperparameter tuning on Anies candidate produces the best embedding value is 128, units 32, dense_units 1, batch_size 16 and epochs 10. 10. The best hyperparameter value for Prabowo candidate produces the best embedding value of 128, units 64, dense_units 1, batch_size 16 and epochs 10. value 128, units 64, dense_units 1, batch_size 32 and epochs 20. Candidate Ganjar's best hyperparameter value produces the best embedding value of 128, units 32, dense_units 1, batch_size 32 and epochs 10.

Keywords: Sentiment Classification, Twitter, LSTM, Hyperparameter Tuning