

## ABSTRAK

Pemilihan presiden Republik Indonesia ramai diperbincangkan di dunia nyata maupun dunia maya, khususnya di media sosial Twitter. Pada saat ini perkembangan media sosial sebagai alat untuk berkomunikasi diantara masyarakat untuk menyampaikan opini, semua orang bebas berpendapat atau beropini tentang calon Presiden dan Wakil Presiden Indonesia 2019 sehingga memunculkan banyak opini, baik itu opini dengan sentimen positif, negatif ataupun netral terhadap calon Presiden dan Wakil Presiden. Penelitian ini dilakukan untuk membandingkan efektifitas algoritma *Support Vector Machine* (SVM) dengan algoritma *K-Nearest Neighbor* (KNN) dan memprediksi hasil pilpres berdasarkan sentiment. Pada penelitian ini telah dilakukan perbandingan algoritma SVM dan algoritma KNN untuk mengklasifikasi sentimen terhadap calon Presiden pada Pilpres 2019 dengan data yang diperoleh dari Twitter. Kemudian dilakukan *preprocessing* dan pembobotan menggunakan TF-IDF. Algoritma SVM memiliki hasil akurasi tertinggi dibandingkan dengan algoritma KNN. Nilai rata – rata akurasi algoritma SVM yaitu 69.27 dengan akurasi tertinggi yaitu 76.5 %, sedangkan nilai rata – rata algoritma KNN yaitu 61.3 % dengan akurasi tertinggi sebesar 68.3 %. Waktu *training* tercepat didapatkan oleh algoritma KNN sedangkan waktu *testing* tercepat yaitu didapatkan oleh algoritma SVM dibandingkan KNN serta hasil prediksi presiden berdasarkan sentiment positif terbanyak yaitu kandidat nomor urut 02 dengan persentase 85,4 % sedangkan jumlah prediksi sentiment positif dari kandidat nomor 01 yaitu 76,8 %.

**Kata Kunci** : Akurasi, Perbandingan, Pilpres 2019, Sentimen Analisis, twitter.



## **ABSTRACT**

*The election of the president of the Republic of Indonesia is widely discussed in the real world and cyberspace, especially on Twitter social media. Today the development of social media as a tool for communicating among the public to convey opinions, all people are free to have an opinion about candidates for President and Vice President of Indonesia in 2019 so that there are appear many opinions, both opinions with positive, negative or neutral sentiments towards candidates for President and Vice President. This study was conducted to compare the effectiveness of the Support Vector Machine (SVM) algorithm with the K-Nearest Neighbor (KNN) algorithm and predict the results of the presidential election based on sentiment. In this study a comparison of the SVM algorithm and the KNN algorithm was carried out to classify sentiments against Presidential candidates in the 2019 Presidential Election with data obtained from Twitter. Preprocessing and weighting are done using TF-IDF. SVM algorithm has the highest accuracy results compared to the KNN algorithm. The average accuracy of the SVM algorithm is 69.27 with the highest accuracy of 76.5%, while the average value of the KNN algorithm is 61.3% with the highest accuracy of 68.3%. The fastest training time was obtained by the KNN algorithm while the fastest testing time was obtained by the SVM algorithm compared to the KNN and the president's prediction results based on the most positive sentiment namely candidate number 02 with 85.4% while the number of candidates for positive sentiment number 01 was 76.8%.*

**Key Words** : Accuracy, Comparison, Presidential Election 2019, Sentiment Analysis, twitter.

