ABSTRAK

Pemilihan metode pembobotan kata berperan krusial dalam meningkatkan performa model deteksi emosi pada teks, khususnya karena dapat berdampak langsung terhadap akurasi. Namun, penerapan pembobotan kata masih terbatas pada metode konvensional dan belum banyak dieksplorasi dalam kombinasi dengan model *transformer* berbahasa Indonesia seperti IndoBERT, terutama untuk deteksi emosi pada platform baru seperti Threads. Penelitian ini bertujuan untuk menguji efektivitas metode TF-IGM dalam meningkatkan akurasi deteksi emosi dari teks pada unggahan pengguna Threads dengan menggunakan model IndoBERT. Data didapatkan melalui proses *scraping*, pelabelan berbasis Roda Emosi Plutchik, dan pembagian data menjadi data latih, validasi, dan uji. Hasil menunjukkan bahwa kombinasi IndoBERT dan TF-IGM dengan $\lambda = 9.0$ pada pembagian data 80:10:10 menghasilkan akurasi tertinggi sebesar 91,11%. Temuan ini menunjukkan bahwa TF-IGM terbukti dapat meningkatkan akurasi deteksi emosi teks dan menjadi alternatif pembobotan kata yang kompetitif dalam deteksi emosi berbasis *transformer*, serta membuka peluang eksplorasi lebih lanjut terhadap kombinasi teknik pembobotan kata dengan arsitektur model yang lebih kompleks.

Kata Kunci: *Term Frequency-Inverse Gravity Moment*, Deteksi Emosi Teks, Roda Emosi Plutchik, Threads, IndoBERT

ABSTRACK

The selection of a term weighting method plays a crucial role in improving the performance of models in emotion detection from text, especially because it can directly impact accuracy. However, the application of term weighting is still limited to conventional methods and has not been widely explored in combination with Indonesian language transformer models such as IndoBERT, especially for emotion detection on new platforms such as Threads. This study aims to test the effectiveness of the TF-IGM method in improving the accuracy of emotion detection from text on the Threads user posts using the IndoBERT model. Data were obtained through a process of scraping, labeling based on Plutchik's Wheel of Emotions, and dividing the data into training, validation, and test. The results show that the combination of IndoBERT and TF-IGM with $\lambda = 9.0$ on a data split of 80:10:10 produces the highest accuracy of 92.1%. These findings indicate that TF-IGM is proven to improve the accuracy of emotion detection from text and is a competitive term weighting alternative in transformer-based emotion detection, as well as opening up opportunities for further exploration of the combination of term weighting techniques with more complex model architectures.

Keywords: *Term Frequency-Inverse Gravity Moment, Text Emotion Detection, Plutchik's Wheel of Emotions, Threads, IndoBERT*