

**ANALISIS SENTIMEN PROGRAM KAMPUS MERDEKA IISMA
BERBASIS KOMENTAR TIKTOK DAN *TWEETS* TWITTER
MENGUNAKAN METODE *SUPPORT VECTOR MACHINE* DAN
*FASTTEXT***

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ABSTRAK

Program *Indonesian International Student Mobility Awards* (IISMA) merupakan sebuah program beasiswa turunan dari Kampus Merdeka yang memberikan kesempatan bagi mahasiswa untuk dapat menempuh studi di mitra universitas luar negeri. Berdasarkan data yang dipaparkan oleh Kemendikbudristek dan Tim IISMA menunjukkan bahwa pada *batch* tahun 2023 terdapat 12.074 pendaftar. Popularitas dan antusias terhadap kehadiran program IISMA menyebabkan banyak opini dan komentar oleh mahasiswa pada sosial media, khususnya komentar TikTok dan *tweets* Twitter. Opini dan komentar yang dilontarkan pada kedua sosial media menghasilkan data dengan jumlah besar dan tidak terstruktur. Penelitian ini memanfaatkan metode *Support Vector Machine* (SVM) dan *FastText* dalam melakukan analisis sentimen dengan mengklasifikasikan data menjadi terstruktur dan menghasilkan informasi berupa rekomendasi. Metode SVM dipilih karena kemampuannya yang dapat menangani masalah ketidakseimbangan data dan melakukan klasifikasi *multi-class*. Metode *FastText* dikolaborasikan dengan SVM karena dapat melakukan ekstraksi fitur dan menghasilkan vektor kata. Hasil penelitian menunjukkan bahwa SVM dan *FastText* dapat melakukan klasifikasi terhadap *dataset* yang dimiliki. Pada *dataset* Twitter mendapatkan nilai *accuracy* sebesar 74.4%, *precision* 49.7%, *recall* 47.9%, dan *f-measure* 47.8%. Pada *dataset* TikTok mendapatkan nilai *accuracy* sebesar 85.0%, *precision* 66.3%, *recall* 67.5% dan *f-measure* 66.5%. Pada *dataset* gabungan antara keduanya mendapatkan hasil nilai *accuracy* sebesar 84.24%, *precision* 68.82%, *recall* 58.81%, dan *f-measure* sebesar 60.95%. Analisis terhadap sentimen pada Program IISMA berdasarkan distribusi sentimen yang cenderung netral menghasilkan rekomendasi yaitu mempertahankan kualitas program dan memberikan bantuan tes bahasa Inggris kepada mahasiswa kurang mampu pada *batch* selanjutnya.

Kata Kunci : IISMA, Analisis Sentimen, *Support Vector Machine*, *FastText*, Twitter, TikTok.

**SENTIMENT ANALYSIS OF THE IISMA MERDEKA CAMPUS PROGRAM
BASED ON TIKTOK COMMENTS AND TWITTER TWEETS USING
SUPPORT VECTOR MACHINE AND FASTTEXT METHODS**

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ABSTRACT

The Indonesian International Student Mobility Awards (IISMA) program is a scholarship program derived from the Kampus Merdeka which provides opportunities for students to study at partner universities abroad. Based on data presented by the Kemendikbudristek and the IISMA Team, it shows that in the 2023 batch there were 12,074 registrants. The popularity and enthusiasm for the presence of the IISMA program has led to many opinions and comments by students on social media, especially TikTok comments and Twitter tweets. Opinions and comments expressed on both social media produce large amounts of unstructured data. This research utilizes the Support Vector Machine (SVM) and FastText methods to carry out sentiment analysis by classifying data into structured ones and producing information in the form of recommendations. The SVM method was chosen because of its ability to handle data imbalance problems and perform multi-class classification. The FastText method is collaborated with SVM because it can perform feature extraction and produce word vectors. The research results show that SVM and FastText can classify the dataset they have. In the Twitter dataset, the accuracy value was 74.4%, precision 49.7%, recall 47.9%, and f-measure 47.8%. In the TikTok dataset, the accuracy value was 85.0%, precision 66.3%, recall 67.5% and f-measure 66.5%. In the combined dataset between the two, the accuracy value was 84.24%, precision was 68.82%, recall was 58.81%, and f-measure was 60.95%. Analysis of sentiment in the IISMA Program based on sentiment distribution which tends to be neutral produces recommendations, namely maintaining the quality of the program and providing English language test assistance to underprivileged students in the next batch.

Keywords : IISMA, Sentiment Analysis, Support Vector Machine, FastText, Twitter, TikTok.