ABSTRAK

Film merupakan kumpulan gambar bergerak yang direkam menggunakan kamera dan diproyeksikan ke layar untuk memberikan ilusi gerakan. Film menjadi sarana hiburan serta media kounikasi visual yang mampu menyampaikan cerita dan pesan kepada audiens. Setiap film dapat diklasifikasikan ke dalam berbagai genre berdasarkan tema, gaya, serta unsur naratif yang terkandung di dalamnya, seperti drama, komedi, fiksi ilmiah, horor, aksi, dan romantis. Untuk membantu penonton dalam memilih film sesuai preferensi mereka dapat dilakukan melalui klasifikasi genre film berdasarkan deskripsi.

Pada penelitian ini mengusulkan penerapan metode *Indonesian Bidirectional Encoder Representation from Transformer* (IndoBERT). Hasil dari representasi IndoBERT digunakan sebagai inpur ke dalam model *Bidirectional Long Short-Term Memory* (BiLSTM) dan *Convolutional Neural Network* (CNN). Data penelitian diperoleh dari dataset *IMDB Synopsis Indonesian Movies* yang terdiri dari 1005 data dengan lima kategori genre: Drama, Laga, Komedi, Horor, dan Romantis.

Berdasarkan hasil penelitian menunjukkan *fine tuning* IndoBERT dengan BiCNN mendapatkan hasil nilai *accuracy* 91,37%, nilai *precision* 91,80%, nilai *recall* 91% dan Fl score 91% dengan batch size 16 learning rate 3e-5 dan *epoch* 50. Sedangkan pada IndoBERT *base* memiliki nilai *accuracy* 88%, *precision* 87.60%, *recall* 88.20%, dan *F1-Score* 88% dengan *epoch* 50. Hasil ini membuktikan bahwa penggunaan IndoBERT dengan arsitektur BiLSTM-CNN dapat meningkatkan kinerja akurasi klasifikasi genre film berdasarkan deskripsi.

Kata Kunci: Film, Genre Film, IndoBERT, BiLSTM, CNN, Klasifikasi Genre Film.

ABSTRACT

A film is a collection of moving images recorded using a camera and projected onto a screen to create the illusion of motion. Films serve as both a form of entertainment and a visual communication medium capable of conveying stories and messages to audiences. Each film can be classified into various genres based on its theme, style, and narrative elements, such as drama, comedy, science fiction, horror, action, and romance. To assist viewers in selecting films that match their preferences, genre classification based on film descriptions can be utilized.

This study proposes the application of the Indonesian Bidirectional Encoder Representation from Transformer (IndoBERT). The representation output from IndoBERT is used as input for the Bidirectional Long Short-Term Memory (*BiLSTM) and Convolutional Neural Network (CNN) models. The research data is obtained from the IMDB Synopsis Indonesian Movies dataset, consisting of 1005 data points categorized into five film genres: Drama, Action, Comedy, Horror, and Romance.*

The research findings indicate that fine-tuning IndoBERT with BiCNN yields an accuracy of 91.37%, a precision of 91.80%, a recall of 91%, and an F1-Score of 91%, with a batch size of 16, a learning rate of 3e-5, and 50 epoch s. In contrast, the IndoBERT base model achieves an accuracy of 88%, a precision of 87.60%, a recall of 88.20%, and an F1-Score of 88% with 50 epoch s. These results demonstrate that the combination of IndoBERT with the BiLSTM-CNN architecture enhances classification accuracy in film genre classification based on descriptions.

Keywords*: Film, Film Genre, IndoBERT, BiLSTM, CNN, Film Genre Classification.*