

**Abstract:**

As technology continues to develop rapidly over the years, the number of digital platforms available has also grown in various fields. One of them is Rotten Tomatoes, a well-known site in the field of cinema that is used to view reviews or review a movie either from famous critics or just ordinary viewers. Giving a review to a movie can have a significant impact on the future of a movie, depending on the value of the review, it can be positive or negative. With the positive and negative values of a review, the review can be analyzed to determine the value of the review. Therefore, there is a technique known as sentiment analysis that is useful for analyzing the value of writing. To perform sentiment analysis, of course, it is necessary to choose the right method, therefore this research uses a method that combines DistilBERT with deep learning, namely BiLSTM. This research also compares the performance of the method when using hyperparameters and not using them. Based on the results of the scenario test, it is found that the model built without hyperparameter tuning gets an accuracy value of 80% and the model built with hyperparameter tuning gets an accuracy value of 82%.

**Keywords:** sentiment analysis, movie review, rotten tomatoes, distilbert, bilstm, bayesian optimization