

# Sentiment Analysis of YouTube Comments

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**Abstract:** *This study explores sentiment analysis of YouTube comments using machine learning algorithms including CNN, LSTM, SVM, Naive Bayes, and Random Forest. Implementing ensemble learning techniques, we evaluate their accuracies to understand public sentiment. The backend is built with Django, frontend with Vue.js, facilitating user-friendly visualization of results. Our findings highlight ensemble learning's effectiveness in enhancing sentiment analysis accuracy, offering insights into public sentiment on online platforms*

**Keywords:** Sentiment Analysis, YouTube Comments, Convolutional Neural Networks (CNN), Long Short-term Memory (LSTM), Support Vector Machines (SVM), Naive Bayes, Random Forest, Ensemble Learning, Frontend and backend Development