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Toxic Comments Classifications

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Abstract: This paper presents a deep learning approach for toxic comment classification using Bidirectional LSTM (Bi LSTM) in TensorFlow. The model identifies multiple categories of toxicity, including toxic, severe toxic, obscene, threat, insult, and identity hate. The dataset from Kaggle's Toxic Comment Classification Challenge is used for training and evaluation. Text vectorization is performed using both TF- IDF and TensorFlow's Text Vectorization layer. The system demonstrates efficient detection of toxic language, offering potential for real-time content moderation

Keywords: Toxic detection, deep learning, Long Short-Term Memory (LSTM), Bidirectional LSTM (BiLSTM), natural language processing (NLP), sentiment analysis, TextBlob, Flask framework, YouTube Data API.







