Bidirectional Encoder Representations from Transformers Sentiment Analysis Applied to Three Presidential Pre-Candidates in Costa Rica

Authors : Félix David Suárez Bonilla

Abstract : A sentiment analysis service to detect polarity (positive, neural, and negative), based on transfer learning, was built using a Spanish version of BERT and applied to tweets written in Spanish. The dataset that was used consisted of 11975 reviews, which were extracted from Google Play using the google-play-scrapper package. The BETO trained model used: the AdamW optimizer, a batch size of 16, a learning rate of 2×10^{-5} and 10 epochs. The system was tested using tweets of three presidential pre-candidates from Costa Rica. The system was finally validated using human labeled examples, achieving an accuracy of 83.3%.