

Emotion Retrieval in Mental Health Context

Orientação a cargo de
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1 Context

Social networking platforms have become an essential means for communicating feelings to the entire world due to rapid expansion in the Internet era. Several people use textual content, pictures, audio, and video to express their feelings or viewpoints. Text communication via Web-based networking media, on the other hand, is somewhat overwhelming. Every second, social media platforms generate a massive amount of unstructured data on the Internet. The data must be processed as rapidly as generated to comprehend human psychology. It can be accomplished using sentiment analysis, which recognizes polarity in texts. It assesses whether the author has a negative, positive, or neutral attitude toward an item, administration, individual, or location. In some applications, sentiment analysis is insufficient and requires emotion detection, which precisely determines an individual's emotional/mental state.

Emotion detection (ED) is a branch of sentiment analysis that deals with the extraction and analysis of emotions. The evolution of Web 2.0 has put text mining and analysis at the frontiers of organizational success, and it helps service providers provide tailor-made services to their customers. Numerous studies are being carried out in text mining and analysis due to the ease of sourcing data and its deliverable's vast benefits.

2 Keywords

Natural Language Processing, Deep Learning and Transformers

3 Goals

Emotion detection and recognition from text is a rapidly evolving research field that shares close ties with sentiment analysis. While sentiment analysis focuses on identifying the positive, neutral, or negative sentiments expressed in text, emotion analysis aims to detect and recognize specific types of emotions conveyed through textual expressions. These emotions include anger, disgust, fear, happiness, sadness, and surprise.

In line with these advancements, this work seeks to contribute to the field by proposing a novel approach to categorizing emotions, particularly within the context of mental health. Recognizing the profound impact of emotions on mental well-being, this research aims to develop an innovative methodology that can effectively identify and categorize emotions expressed in text, explicitly focusing on the mental health domain.

By considering the unique challenges and nuances associated with emotions in the context of mental health, this approach intends to capture the intricacies and complexities of emotional experiences more accurately. It aims to leverage state-of-the-art techniques and methodologies, such as natural language processing, machine learning, and deep learning, to create a robust and reliable model for emotion categorization.

The ultimate goal is to enhance our understanding of emotional patterns within the mental health context, enabling researchers, clinicians, and practitioners to gain valuable insights into individuals' emotional states and needs. This research can potentially improve mental health interventions, facilitate personalized therapy approaches, and contribute to individuals' overall well-being and support navigating mental health challenges.

In summary, this work proposes an innovative approach to categorizing emotions within the mental health context, aiming to advance our understanding of emotional experiences and their implications for mental well-being. The research significantly contributes to emotion analysis and its application in mental health contexts by leveraging cutting-edge methodologies.

4 Workplan

- T1** Review the State-of-the-art;
- T2** Propose a new Unsupervised and Language Independent Approach to Emotion Detect;
- T3** Implementation;
- T4** Testing and evaluation;
- T5** The writing of the report.