

# Personality Retrieval

Orientação a cargo de  
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## 1 Context

Personality analysis is a natural human capacity that individuals exercise daily for various reasons, necessitating applications such as mental health diagnosis and human resource recruitment. Because people express a great deal of information through writing, consciously and subconsciously, it is possible to deduce a personality type from these written materials. Recently, recognizing personality from text via social media has garnered considerable attention. However, most existing methods have concentrated on letters, words, and phrases that do not appear to be sufficient to obtain a satisfactory result. The distinguishing characteristics that belong to a person are personality traits, which are predicted by a person's behavioural pattern. As most people provide lots of information knowingly or unknowingly in their writings, it is possible to extract personality traits from those texts. Individual personality traits detection from texts yields enormous possibilities for various applications named as a forensic department, mental health diagnosis, etc. Meanwhile, the deep learning algorithm performs reasonably well in text-based personality detection; however, its performance may vary with activation functions.

## 2 Keywords

Natural Language Processing, Deep Learning and Transformers

## 3 Goals

Personality Detection and Recognition from text is a recent research field closely related to Sentiment Analysis and Emotion Detection. Sentiment Analysis aims to detect text's positive, neutral, or negative feelings. In contrast, Emotion Analysis aims to detect and recognize types of feelings through the expression of texts, such as anger, disgust, fear, happiness, sadness, and surprise. So, Personality Detection is typically formally described in terms of the Big Five personality traits, which are the following binary (yes/no) values: Extroversion, Neuroticism, Agreeableness, Conscientiousness and Openness.

Thus, this work proposes to develop a new approach to detect the personality based on Transformers.

## 4 Workplan

**T1** Review the State-of-the-art;

**T2** Propose a new Multilanguage Approach to Personality Retrieval;

**T3** Implementation;

**T4** Testing and evaluation;

**T5** The writing of the report.