Personality Prediction From Social Media

Abstract:- With the rapid growth of social media, users are getting involved in virtual socialism, generating a huge volume of textual and image contents. Considering the contents such as status updates/tweets and shared posts/retweets, liking other posts is reflecting the online behavior of the users. Predicting personality of a user from these digital footprints has become a computationally challenging problem. In a profile-based approach, utilizing the user-generated textual contents could be useful to reflect the personality in social media. Using huge number of features of different categories, such as traditional linguistic features (character-level, word-level, structural, and so on), psycholinguistic features (emotional affects, perceptions, social relationships, and so on) or social network features (network size, betweenness, and so on) could be useful to predict personality traits from social media. According to a widely popular personality model, namely, big-five-factor model (BFFM), the five factors are openness-to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Predicting personality is redefined as predicting each of these traits separately from the extracted features. Traditionally, it takes huge number of features to get better accuracy on any prediction task although applying feature selection algorithms may improve the performance of the model. In this article, we have compared the performance of five feature selection algorithms, namely the Pearson correlation coefficient (PCC), correlation-based feature subset (CFS), information gain (IG), symmetric uncertainly (SU) evaluator, and chi-squared (CHI) method. The performance is evaluated using the classic metrics, namely, precision, recall, f-measure, and accuracy as evaluation matrices.

Hardware Requirements:

- Processor : Pentium-IV
- Speed : 1.1 GHz
- RAM : 512 MB(min)
- Hard Disk : 40 GB
- Key Board : Standard Windows Keyboard
- Mouse : Two or Three Button Mouse
- Monitor : LCD/LED

Software Requirements:

- IDE : Spyder
- Coding Language : Python Version 3.8
- Operating System : Windows 10

Technical papers:

1. Social Media Text - A Source for Personality Prediction

2. Personality Predictions Based on User Behavior on the Facebook Social Media Platform

3Personality Recognition on Social Media with Label Distribution Learning

Names of modules For Proposed system:

User, upload dataset, Preprocessing, Feature Extraction, Classification

Platforms and tools planned to use for implementation:

Anaconda Navigator, Spyder

Identification of input dataset:

Real time Capturing of face and formation of dataset.

In the dataset atleast 100 images.