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In collaboration with

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**Personality prediction system through analysing CVs/personal
statements for e-recruitment**

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Abstract

With the increasing prevalence of the internet and globalisation, many services have shifted to automation. Recruitment processes are no exception, with e-recruitment systems becoming increasingly popular. These systems aim to automate most recruitment steps, but typically do not account for the candidate's personality. This is a significant issue, as a candidate's personality is crucial for workplace compatibility, and ultimately job success and longevity. Without a personality detection mechanism, recruiters must often conduct multiple interviews to determine compatibility, resulting in a lengthy and inefficient recruitment process. Previous research in this area has focused solely on detecting personality through quizzes, rather than recruitment-related documents. To address this gap, this research aims to develop a system that can detect a candidate's personality from their CV/personal statement. Users can upload their CV/personal statement and receive their detected personality based on the Myers-Briggs Type Indicator's sixteen personality types, which cover a wide range of traits and characteristics. The proposed system uses the deep learning method BERT to detect personality trait with an accuracy of up to 79.9%. Once a candidate's personality is determined, the system can match them with available job roles based on compatibility. This research offers a valuable contribution to the field of recruitment automation and has the potential to streamline recruitment processes and improve job satisfaction for candidates.

Subject Descriptors: Personality Detection, Deep learning

Keywords: BERT, MBTI personality types