

AI Knows You Deep Learning Model for Prediction of Extroversion Personality Trait

ABSTRACT

The project AI Knows You Deep Learning Model for Prediction of Extroversion Personality Trait presents an AI-driven Personality Prediction System that analyzes text input to classify personality traits based on the Myers-Briggs Type Indicator (MBTI). Traditional personality assessments rely on self-reported questionnaires, which can be subjective. To overcome this, Natural Language Processing (NLP) and Machine Learning (ML), and Deep Learning techniques were leveraged. Support Vector Machine (SVM) for classification, using TF-IDF vectorization to extract linguistic features from text. We also utilize a Long Short-Term Memory (LSTM) network, a type of Recurrent Neural Network (RNN) that effectively captures sequential patterns and contextual information from text data, ensuring robust personality classification. Additionally, an AI-generated text detection module ensures input authenticity. Based on the predicted personality, the system provides personalized job recommendations and career insights. By integrating SVM-based personality prediction with career guidance, this project offers an accessible and reliable tool for users to better understand their traits and professional suitability, making career decisions more data-driven and efficient.

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Aswathi E (MAC22CD022)
Gelsa Greenson (MAC22CD031)
Neethu Shankar (MAC22CD045)