NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

School of Computer Science and Engineering
College of Engineering

Personality Prediction

From Text Based on the MBTI Model

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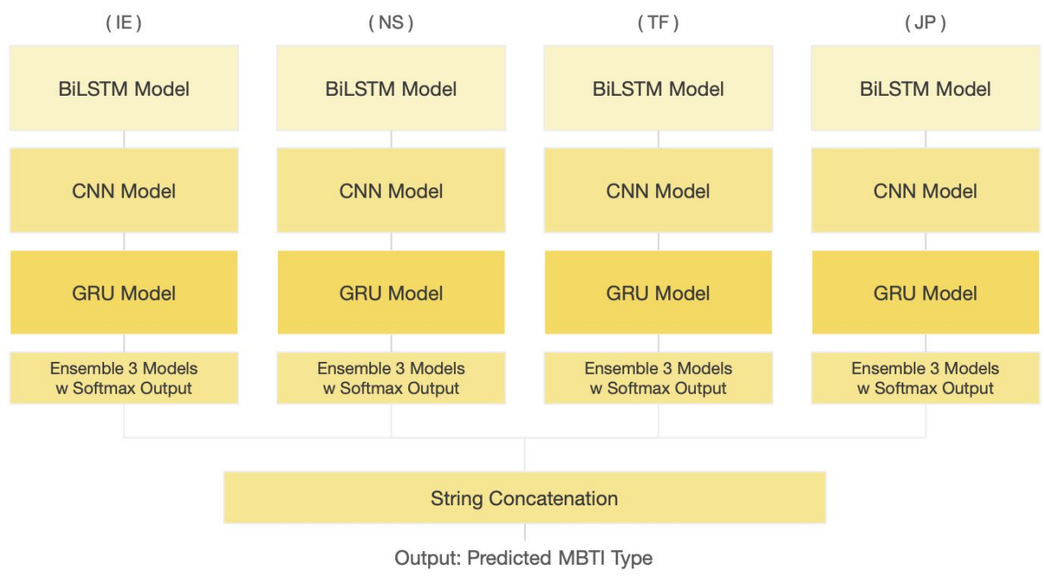
Project Objectives

Personality is the driving factor for human behavior. Distinguished thought patterns, emotionality, and temperament are some aspects that can be understood from a personality. Traditionally, one's personality can be obtained through online self-assessments. The aim of this project is to experiment with deep learning techniques to predict personalities of the Myers-Briggs Type Indicator (MBTI) Model, along with a prediction tool to mitigate response bias issues faced in online personality assessments. There are 16 different MBTI types, consisting of 4 distinctive personality axes.

Methods

- Machine Learning
- Transformers & Transfer Learning
- Neural Networks with GloVe
- Ensemble Learning
- Multi-Task Learning
- Hybrid Model with Self-Attention

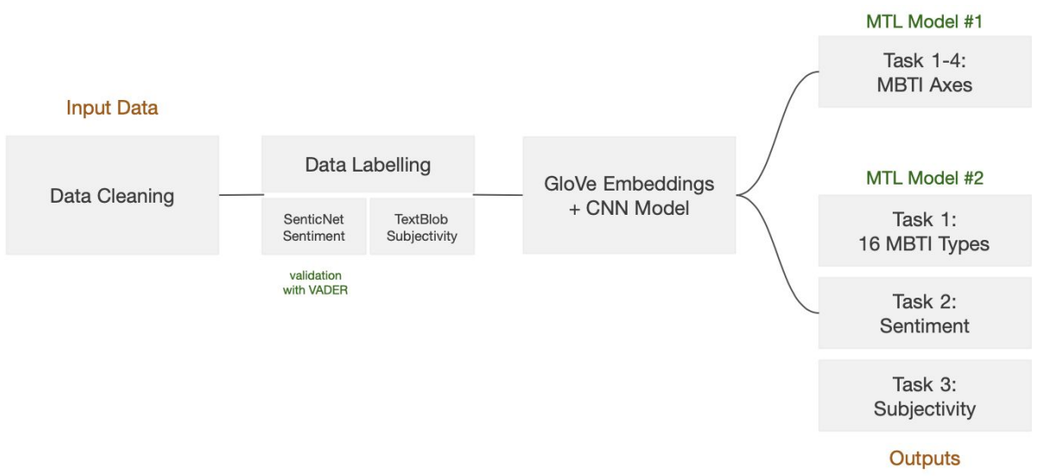
Ensemble Learning

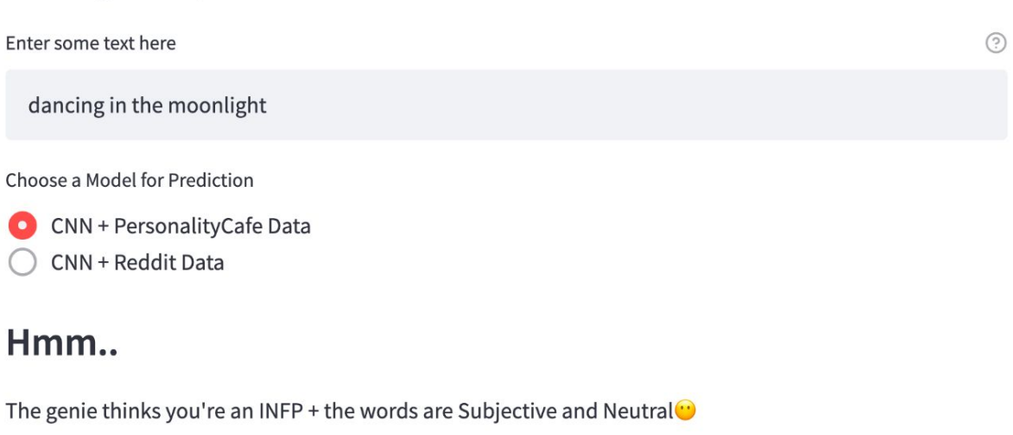


MBTI Prediction Tool

The prediction tool contains 2 CNN models for personality prediction, each trained with a different dataset.

Multi-Task Learning





Hybrid Model with Self-Attention