PERSONALITY PREDICTION

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ASTRACT

- Personality prediction is an area of research that aims to identify and understand individual differences in human behavior, thought patterns, and emotions.
- With the aid of machine learning model and data-sets the main aim of this paper is to predict the Myers–Briggs type Indicator (MBTI) personality type of the twitter user. The Myers-Briggs type Indicator is probably the maximum widely used personality check within the world.
- The predictor will help to predict 1 of 16 different personalities of the user based on their Twitter account. The text is preprocessed to get clean. After tokenizing of the data, machine learning model - LSTM (Long Short Term Memory Networks) has been built. The predictor endeavors to get of the personality type, traits and careers suitability.

PROBLEM STATEMENT

- Personality of a person plays a crucial role in the organizational progress and also in the self-development process in an individual's life.
- The proposed system aims to address how the dissatisfying accuracy of personality type prediction based on MBTI can be improved as well as it addresses the need to have larger dataset so that classification can be performed for all dichotomies
- Many people find it difficult to identify the suitable career for themselves. This leads to them making wrong decisions and choosing a wrong career path.

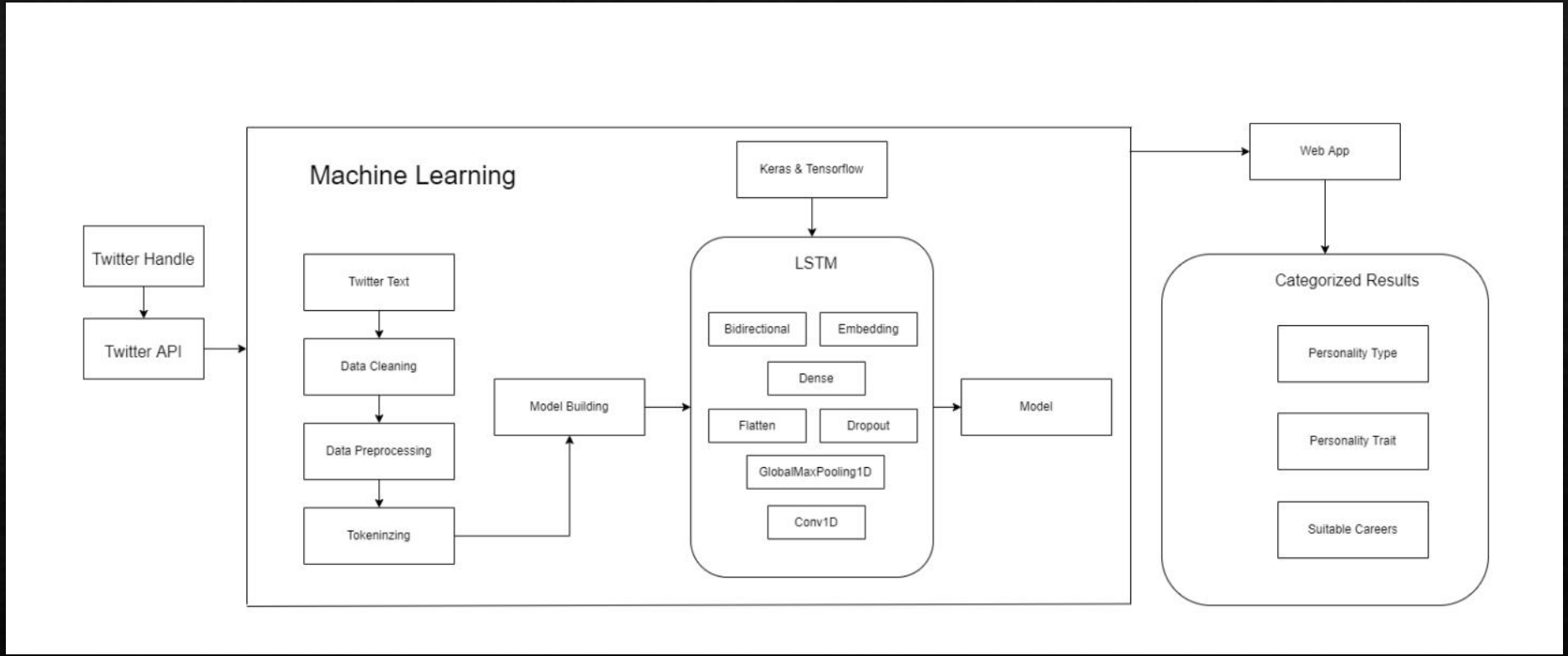
SCOPE

- The aim of the Myers-Briggs Type Indicator (MBTI) personality predictor is to make the social media that is Twitter texts understandable to the users in identifying their personality type which is useful in determining their job suitability.
- The purpose is to help the user in recognizing any trends or patterns that can be detected in their style of writing Twitter texts, which in turn helps in analyzing, predicting or categorizing behavior into different dichotomies.
- The predictor helps the users to identify if they are Analyst or Diplomats or Sentinels or Explores. By analyzing candidates' Twitter texts, MBTI personality types are predicted

IMPLEMENTATION

- Step 1: Data Gathering:
- Step 2: Data Preprocessing:
- Step 3: Model Creation
- Step 4: Model analysis
- Step 5: Comments analysis
- Step 6: Coding the Functions
- Step 7:Testing
- Step 8: Deployment

SYSTEM ARCHITECTURE



CODING

- The coding aspect of personality prediction involves implementing algorithms and models that can analyze data and predict personality traits. There are various programming languages and frameworks that can be used for this purpose, including Python, R, TensorFlow, PyTorch, and Keras. Python is one of the most popular programming languages for AI, and it has a rich set of libraries and tools for data analysis, machine learning, and deep learning.
- To code personality prediction models, developers can use various machine learning algorithms, such as decision trees, logistic regression, and neural networks. Decision trees are simple models that can be used for classification tasks, such as predicting whether a person is introverted or extroverted. Logistic regression is a statistical model that can be used to predict binary outcomes, such as whether a person is likely to be creative or not. Neural networks are more complex models that can be used for various tasks, including personality prediction.

TESTING

- Testing personality prediction models is a crucial step in the development process. Developers need to ensure that their models are accurate and reliable, and that they can make predictions with high confidence.
- To test personality prediction models, developers can use various techniques, including cross-validation, testing, and performance metrics.
- Cross-validation involves dividing the data into multiple subsets and using each subset for testing and training the model. This technique helps to ensure that the model is not overfitting to the training data and that it can make accurate predictions on new data.

Dependencies of the system -

- Scikit-learn
- NLTK
- SpaCy
- Keras
- TensorFlow
- Pytorch
- Sklearn
- Pandas
- scaPy

MODEL PERFORMANCE

- : Comparing algorithms helps to evaluate the performance of each algorithm.
- . 1. Identifying Strengths and Weaknesses
- . 2. Optimization
- 3. Generalization
- 4. Transparency

FEATURE CORRELATION ANALYSIS

- Feature correlation analysis is an important step in an AI project because it helps to identify the relationships between the features and the target variable. Here are some reasons why feature correlation analysis is important in an AI project:
- 1. Feature Selection.
- 2. Model Interpretation
- 3. Model Performance
- 4. Data
- 5. Feature Engineering

IMPLEMENTING MODEL TO PREDICT PERSONALITIES

- 1. Validation
- 2. Generalization
- 3. Impact
- 4. Feedback
- 5. Ethics

CONCLUSION

- In this project, the study investigates the literature on the uses of social media framework as behavioral features by exploring the relationship between users' personalities and their behaviors in social networks
- The recommended system stipulates the Myers–Briggs kind Indicator with a view to categorize the character types in sixteen patterns through 4 dichotomies, specifically, (1) Introversion - Extroversion, (2) Sensing - Intuition, (3) Thinking - Feeling and (4) Judging - Perceiving.
- Overall, our project has significant implications for the fields of personality psychology and AI. Our model has the potential to help organizations make better hiring decisions, improve mental health interventions, and enhance personalized user experiences across various industries.

FUTURE ENHANCEMENTS

- Expand the dataset
- Incorporate additional features
- Evaluate the model's fairness
- Extend the model to other personality traits
- Develop user-friendly interfaces

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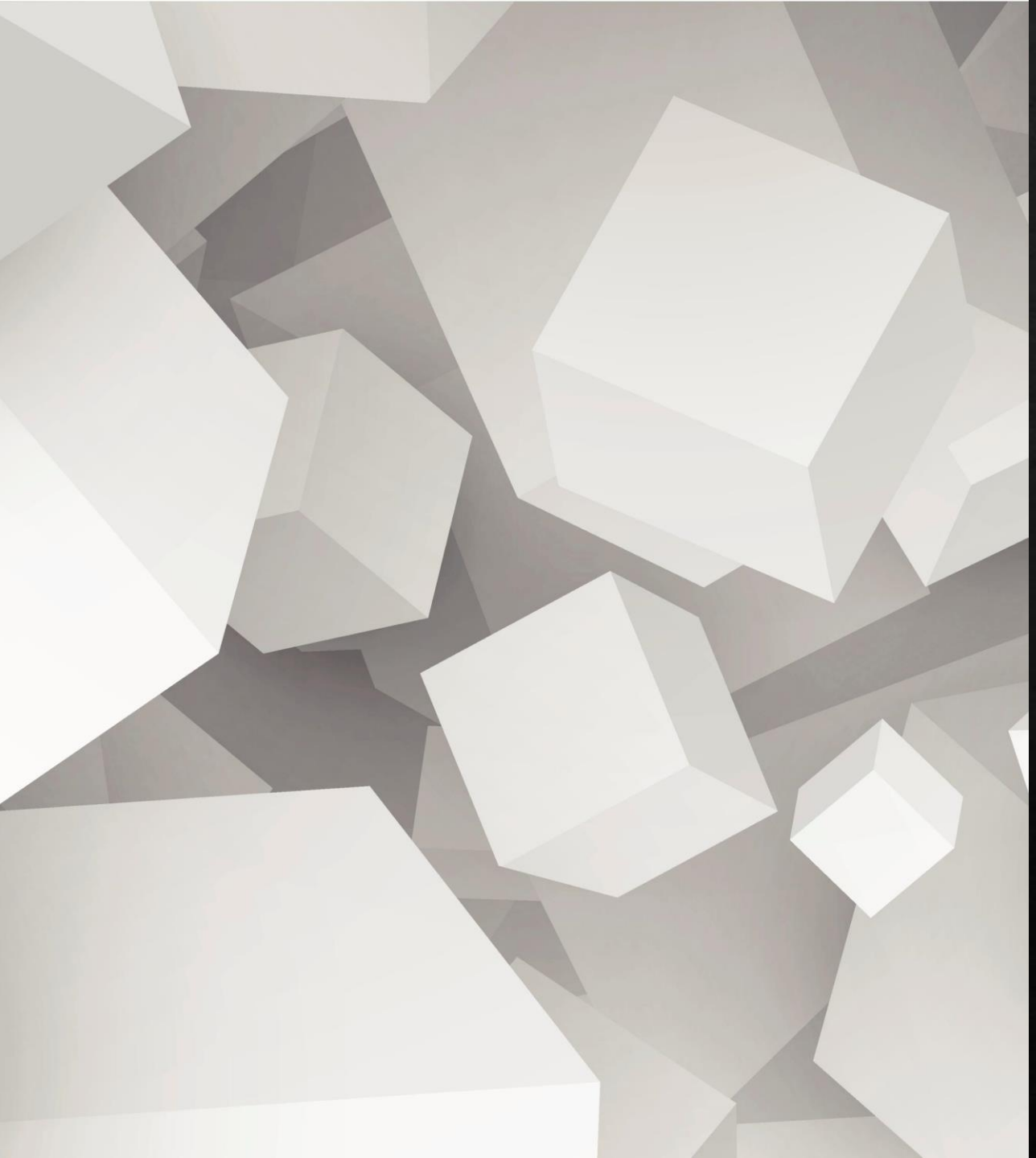

THANK YOU