Task-1 Report

DataMites

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Task

Imagine you are tasked with building a simple Natural Language Understanding (NLU) system to classify intents from text input. Your goal is to train a model using given text examples for different intents and then test it with random texts, providing an intent classification along with a confidence score. You are also required to implement a fallback mechanism in case the confidence level does not meet a certain threshold

Approach

The primary objective of this project is to develop a robust methodology for generating top-tier Natural Language Understanding (NLU) recommendations. Our approach integrates Random Forest for its ensemble learning capabilities and BERT (Bidirectional Encoder Representations from Transformers) for word embedding,By leveraging the strengths of both Random Forest and BERT, we aim to provide nuanced and contextually relevant NLU suggestions, enhancing the overall efficacy of language comprehension systems.

Steps To Build the Model

1. created a dataset using AI tools
2. load those data to the notebook
3. Load BERT encoders to embed the text
4. Decision Tree algorithm used to classify
5. Used A threshold value of 0.7 most of models use that value