

Replication Instructions

To replicate the results reported in this project, follow the steps below:

1. Make sure the following files are placed in the same directory:

- br_classification.py (baseline method using TF-IDF + Naive Bayes)
- bert_classification.py (proposed method using BERT)
- The corresponding dataset CSV files (e.g., keras.csv, pytorch.csv, etc.)

2. Choose the project you want to evaluate by editing the following lines in both scripts:

```
# Choose the project (options: 'pytorch', 'tensorflow', 'keras', 'incubator-mxnet', 'caffe')
project = 'keras'
path = f'{project}.csv'
```

Replace 'keras' with the project of your choice (e.g., 'pytorch').

3. To run the baseline method, execute:

```
python br_classification.py
```

This will train and evaluate the Naive Bayes model using TF-IDF features.

4. To run the BERT-based method, execute:

```
python bert_classification.py
```

This will train and evaluate the BERT-based classifier.

Both scripts will output the results directly to the terminal and may also save performance metrics in CSV format for later comparison.

Ensure that all required dependencies listed in requirements.txt are installed before running the scripts.