

1. Create a Virtual Environment
2. Install the required packages (requirements.txt)
3. Download the folders 'ise-lab1'
4. Choose the dataset (options: 'pytorch', 'tensorflow', 'keras', 'incubator-mxnet', 'caffe') and change it

```
# Choose the project (options: 'pytorch', 'tensorflow', 'keras', 'incubator-mxnet', 'caffe')
```

```
project = 'caffe'
```

5. Run the code (python xgboost_classification.py)

Each time running will proceed 10 epoches

6. Wait for some time, you will see the outcome

```
=== Pretrained sentences embedding + XGClassifier Results ===
```

```
Number of repeats:      10
Average Accuracy:       0.8444
Average Precision:      0.7106
Average Recall:         0.8502
Average F1 score:       0.7426
Average AUC:            0.8502
```

```
Results have been saved to: ../pytorch_XGBoost.csv
```

7. The results will be saved to XX_XGBoost.csv (eg. pytorch_XGBoost.csv)

	A	B	C	D	E	F	G	H	I
1	repeated_times	Accuracy	Precision	Recall	F1	AUC	CV_list(AUC)		
2	10	0.844371	0.708842	0.842845	0.740315	0.842845	[0.8114035087719298, 0.84407665505]		
3	10	0.845695	0.711464	0.847703	0.74317	0.847703	[0.8391812865497076, 0.84407665505]		
4	10	0.846358	0.710376	0.845683	0.742602	0.845683	[0.8226817042606517, 0.84407665505]		
5	10	0.846358	0.713484	0.853802	0.745733	0.853802	[0.8391812865497076, 0.84407665505]		
6	10	0.847682	0.712644	0.849902	0.745344	0.849902	[0.8226817042606517, 0.84407665505]		
7	10	0.844371	0.710611	0.85024	0.742585	0.85024	[0.8114035087719298, 0.84407665505]		
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