1. **About the code of Bert-BiLSTM model**
2. Code function

This code mainly realizes the functions of dataset download, dataset preprocessing; model definition, model hyper-parameter setting, model training and evaluation, model saving, and using the model for classification prediction.

1. Usage

Need to run in an environment with gpu. It is recommended to use ipynb file to run, if you use py file, please make sure the following package is installed:

pip install transformers

1. Runtime Enviroment

Python version：3.10.11

Pytorch version：2.0.0

Torchtext version：0.15.1

1. Data input

training/test dataset: The code directly uses instructions to download data from the web page and run the full code directly.

!wget https://ai.stanford.edu/~amaas/data/sentiment/aclImdb\_v1.tar.gz

!tar -zxvf aclImdb\_v1.tar.gz

1. **About the code of model\_classification.py**
2. Code function

This file is used to make predictions about news already in the current database. Sentiment categorization can be done for a specified single news item, or for all news items in the entire input file, with a positive(1) or negative(0) classification.

1. Usage

Please make sure the path of the model is right:

model\_path = 'BERT-BiLSTM\_sentiment\_analysis.pt'

Please make sure the following package is installed:

pip install transformers

1. Runtime Enviroment

Python version：3.10.11

Pytorch version：2.0.0