

# 文本情感分类作业 代码部分README

## 环境配置

- requirements.txt中有所需要的环境，可以按照如下方式安装所需的包

```
pip install -r requirements.txt
```

## 运行代码

不同模型存储在不同.ipynb文件中，以下为运行模型的步骤

- 首先，打开train\_xxxx.ipynb文件
- 其次，在每个.ipynb的第二个单元格中，可以手动设置超参数
- 最后，点击“运行全部单元格”即可看到“每轮训练的输出（包含train\_acc validation\_acc validation\_f\_score）”，以及最后“validation上面最优秀者在test集上的表现”（即test\_acc test\_f\_score）
- 注意：所有模型的运行都需要在GPU进行（尤其Bert还要求GPU性能较好，才能快速完成训练和推理）

输出格式如下

```
epoch 1, loss 0.5724, train_acc 0.697, validation_acc 0.741, validation_f_score, 0.776, time 16.1
epoch 2, loss 0.2343, train_acc 0.783, validation_acc 0.805, validation_f_score, 0.808, time 9.5
epoch 3, loss 0.1423, train_acc 0.809, validation_acc 0.758, validation_f_score, 0.796, time 10.1
epoch 4, loss 0.0990, train_acc 0.823, validation_acc 0.820, validation_f_score, 0.824, time 7.8
epoch 5, loss 0.0742, train_acc 0.836, validation_acc 0.818, validation_f_score, 0.828, time 8.0
epoch 6, loss 0.0613, train_acc 0.841, validation_acc 0.803, validation_f_score, 0.820, time 8.3
epoch 7, loss 0.0477, train_acc 0.855, validation_acc 0.829, validation_f_score, 0.834, time 8.2
epoch 8, loss 0.0376, train_acc 0.872, validation_acc 0.807, validation_f_score, 0.782, time 8.2
epoch 9, loss 0.0305, train_acc 0.885, validation_acc 0.822, validation_f_score, 0.813, time 12.1
epoch 10, loss 0.0246, train_acc 0.896, validation_acc 0.813, validation_f_score, 0.816, time 11.1
epoch 11, loss 0.0189, train_acc 0.915, validation_acc 0.827, validation_f_score, 0.828, time 6.1
epoch 12, loss 0.0158, train_acc 0.921, validation_acc 0.821, validation_f_score, 0.813, time 8.1
epoch 13, loss 0.0129, train_acc 0.933, validation_acc 0.812, validation_f_score, 0.813, time 10.1
epoch 14, loss 0.0111, train_acc 0.941, validation_acc 0.822, validation_f_score, 0.829, time 8.1
epoch 15, loss 0.0100, train_acc 0.940, validation_acc 0.819, validation_f_score, 0.821, time 6.1
epoch 16, loss 0.0073, train_acc 0.955, validation_acc 0.812, validation_f_score, 0.818, time 9.1
epoch 17, loss 0.0059, train_acc 0.962, validation_acc 0.816, validation_f_score, 0.821, time 8.1
epoch 18, loss 0.0052, train_acc 0.966, validation_acc 0.813, validation_f_score, 0.814, time 9.1
epoch 19, loss 0.0048, train_acc 0.967, validation_acc 0.812, validation_f_score, 0.812, time 6.1
epoch 20, loss 0.0042, train_acc 0.969, validation_acc 0.807, validation_f_score, 0.799, time 11.1
total_epoch 20, test_acc 0.848, test_f_score, 0.849
```