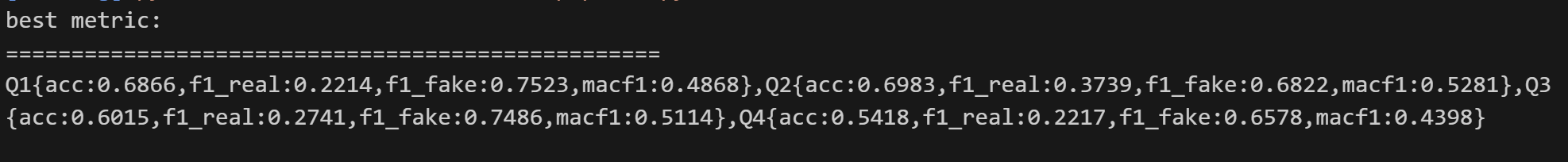
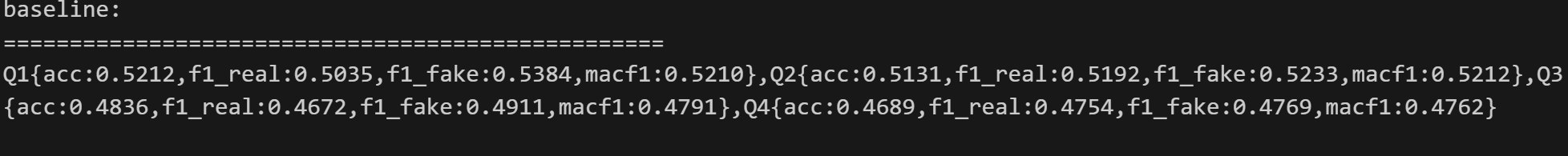
**下面的表格显示了在统一新闻集中，baseline与FTT模型的整体和季度表现（加粗为该项最优）**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Baseline** | **FTT** |
| Q1 | **Accuracy** | 0.5212 | **0.6866** |
| **Mac F1** | **0.5210** | 0.4868 |
| **F1 real** | **0.5035** | 0.2214 |
| **F1 fake** | 0.5384 | **0.7523** |
| Q2 | **Accuracy** | 0.5131 | **0.6983** |
| **Mac F1** | 0.5212 | **0.5281** |
| **F1 real** | **0.5192** | 0.3739 |
| **F1 fake** | **0.5233** | 0.6822 |
| Q3 | **Accuracy** | 0.4836 | **0.6015** |
| **Mac F1** | 0.4791 | **0.5114** |
| **F1 real** | **0.4672** | 0.2741 |
| **F1 fake** | 0.4911 | **0.7486** |
| Q4 | **Accuracy** | 0.4689 | **0.5418** |
| **Mac F1** | **0.4762** | 0.4398 |
| **F1 real** | **0.4754** | 0.2217 |
| **F1 fake** | 0.4769 | **0.6578** |
| Average | **Accuracy** | 0.4944 | **0.5570** |
| **Mac F1** | **0.4993** | 0.4915 |
| **F1 real** | **0.4913** | 0.2723 |
| **F1 fake** | 0.5074 | **0.7102** |

从指标上看，我们可以发现：

1. FTT在预测上显示出F1 fake和F1 Real的不均衡，F1 Real要明显低于F1 fake。
2. 与baseline模型相比，在Accuracy指标上，FTT的性能要优于baseline模型，而Mac F1指标则是Baseline优于FTT模型。在综合性能（即Mac F1），baseline要优于FTT。在F1 Real上，FTT表现要远差于Baseline模型，而在F1 fake上，FTT提升明显。



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1. **Case study**

通过画出某个特定主题的新闻的时间分布，分析该主题的趋势情况，然后针对该新闻再次通过模型预测，查看basline模型和FTT模型对该新闻的预测情况，尤其注意那些趋势明显且Baseline预测错误而FTT预测正确的案例，以分析FTT在原有模型基础上的性能的提升。

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **eab24f865b2915601ede3299a1562e7** | |  |  | | --- | --- | | **Baseline** | **Real(0.39)** | | **FTT** | **Fake(0.67)** | | **真实值** | **Fake** | |
| **例：**Jonathan Smith is facing fresh allegations of sexual assault. A lady named as Joan Smith has lodged a $7 million claim against him in the New York Supreme Court on Monday. | |
| 6c382f36a1122e7177f882ca6427042 | |  |  | | --- | --- | | **Baseline** | **Real(0.47)** | | **FTT** | **Fake(0.58)** | | **真实值** | **Fake** | |
| **例：**OMG! Breaking News: Gronk Makes Unbelievable Move at White House Meeting!The New England Patriots are currently at the White House, where they were honored by President Donald Trump for their recent Super Bowl win. But things took an unexpected turn when tight end Rob Gronkowski decided to crash Sean Spicer's daily briefing! According to sources, Gronk walked away from the group and approached Spicer. | |

在这两个案例中，主题都呈现出一种比较直观和显著的时间分布趋势，等权重的baseline模型对这些新闻预测错误，但是FTT模型对新闻实例重新加权后训练后，预测结果实现了翻转。