

| batch_size | epochs | learning_rate | avg_f1_macro | avg_f1_weighted | avg_precision_macro | avg_recall_macro |
|------------|--------|---------------|--------------|-----------------|---------------------|------------------|
| 256 | 100 | 0.001 | 0.4131798458 | 0.5831225815 | 0.3948980948 | 0.5770690195 |
| 256 | 80 | 0.001 | 0.4067727363 | 0.5775525405 | 0.3853218281 | 0.5649617083 |
| 512 | 100 | 0.01 | 0.3888079348 | 0.5741997027 | 0.3728356158 | 0.5730832422 |
| 64 | 80 | 0.001 | 0.3987197961 | 0.5710195986 | 0.3775434452 | 0.5660456156 |
| 256 | 50 | 0.001 | 0.397307994 | 0.5698308505 | 0.387028818 | 0.550390812 |
| 256 | 50 | 0.001 | 0.3893548463 | 0.5698160035 | 0.3691349102 | 0.5548088333 |
| 128 | 80 | 0.001 | 0.3980807738 | 0.5669125716 | 0.3834867333 | 0.5621184508 |
| 128 | 100 | 0.001 | 0.4041937879 | 0.5657792633 | 0.3827332716 | 0.5721746921 |
| 128 | 100 | 0.001 | 0.3938800702 | 0.5655814612 | 0.3766473369 | 0.5620950682 |
| 128 | 80 | 0.001 | 0.3883275447 | 0.5654025284 | 0.3750873415 | 0.5486260218 |