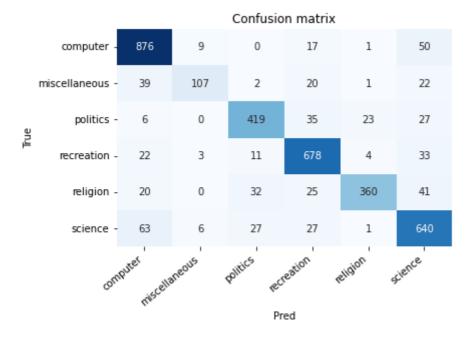
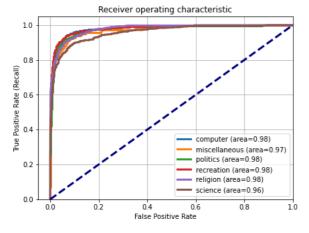
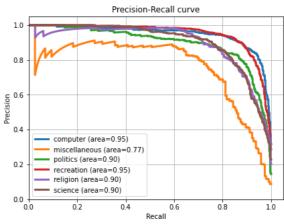
Pure TF-IDF Note

LR:

| Accuracy: 0.84 Auc: 0.97 | | | | |
|-----------------------------|-------------|--------|-----------|---------|
| Detail: | precision | recall | f1-score | support |
| | p. 00101011 | | . 1 500.0 | Support |
| computer | 0.85 | 0.92 | 0.89 | 953 |
| miscellaneous | 0.86 | 0.56 | 0.68 | 191 |
| politics | 0.85 | 0.82 | 0.84 | 510 |
| recreation | 0.85 | 0.90 | 0.87 | 751 |
| religion | 0.92 | 0.75 | 0.83 | 478 |
| science | 0.79 | 0.84 | 0.81 | 764 |
| | | | | |
| accuracy | | | 0.84 | 3647 |
| macro avg | 0.85 | 0.80 | 0.82 | 3647 |
| weighted avg | 0.85 | 0.84 | 0.84 | 3647 |







SVM:

| Accuracy: 0.85 Auc: 0.98 | | | | |
|--------------------------|-----------|--------|----------|---------|
| Detail: | precision | recall | f1-score | support |
| computer | 0.87 | 0.91 | 0.89 | 953 |
| miscellaneous | 0.89 | 0.61 | 0.72 | 191 |
| politics | 0.86 | 0.84 | 0.85 | 510 |
| recreation | 0.87 | 0.90 | 0.89 | 751 |
| religion | 0.93 | 0.76 | 0.84 | 478 |
| science | 0.77 | 0.86 | 0.81 | 764 |
| accuracy | | | 0.85 | 3647 |
| macro avg | 0.87 | 0.81 | 0.83 | 3647 |
| weighted avg | 0.86 | 0.85 | 0.85 | 3647 |

