Model: BERT

	precision	recall	f1-score	support
0	0.90	0.96	0.93	706
1	0.70	0.44	0.54	134
accuracy			0.88	840
macro avg	0.80	0.70	0.74	840
weighted avg	0.87	0.88	0.87	840

Confusion Matrix

Confusion Matrix of Bert

ROC Curve

ROC Curve of Bert
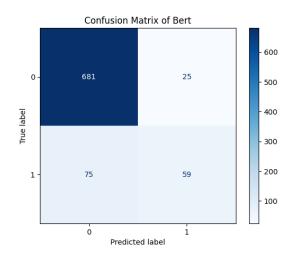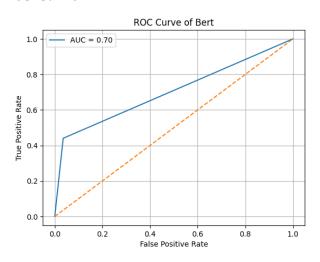
Model: Logistic Regression

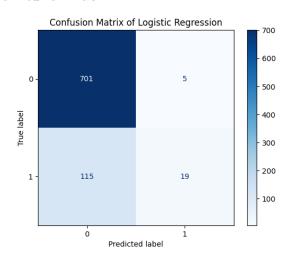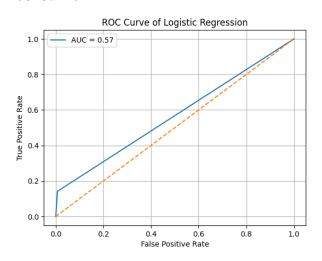|	precision	recall	f1-score	support
0	0.86	0.99	0.92	706
1	0.79	0.14	0.24	134
accuracy			0.86	840
macro avg	0.83	0.57	0.58	840
weighted avg	0.85	0.86	0.81	840

Confusion Matrix

Confusion Matrix of Logistic Regression

ROC Curve

ROC Curve of Logistic Regression

Model: Random Forest

	precision	recall	f1-score	support
0	0.88	0.90	0.89	706
1	0.39	0.35	0.37	134
accuracy			0.81	840
macro avg	0.63	0.62	0.63	840
weighted avg	0.80	0.81	0.80	840

Confusion Matrix

Confusion Matrix of Random Forest

ROC Curve

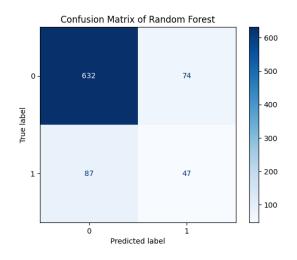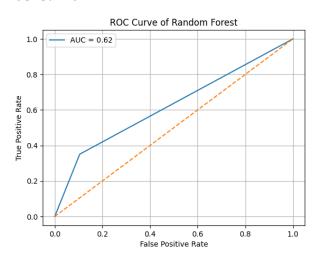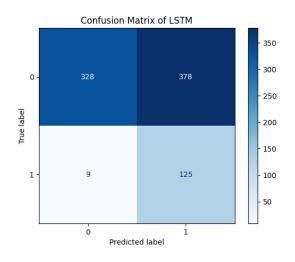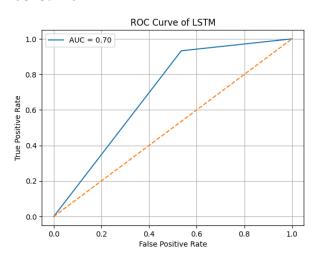ROC Curve of Random Forest

AUC = 0.62

Model: LSTM

	precision	recall	f1-score	support
0	0.97	0.46	0.63	706
1	0.25	0.93	0.39	134
accuracy			0.54	840
macro avg	0.61	0.70	0.51	840
weighted avg	0.86	0.54	0.59	840

Confusion Matrix

ROC Curve

Confusion Matrix of LSTM

ROC Curve of LSTM

Model Performance Summary

Model	Precision	Recall	F1	Accuracy	Macro F1	Weighted F1
Logistic Regression	0.79	0.14	0.24	0.86	0.57	0.86
Random Forest	0.39	0.35	0.37	0.81	0.62	0.81
LSTM	0.25	0.93	0.39	0.54	0.70	0.54
BERT	0.70	0.44	0.54	0.88	0.74	0.87