

ML Model Performance Results Table

Model	Embedding	Accuracy (%)	Precision (%)	Recall (%)	F1 Score (%)
SVM	MPNet	94.69	94.62	94.69	94.59
LightGBM	MPNet	94.69	94.78	94.69	94.49
XGBoost	MPNet	94.69	94.70	94.69	94.52
SVM	all-MiniLM-L6	94.69	94.65	94.69	94.55
Logistic Regression	MPNet	94.06	94.09	94.06	94.08
AdaBoost	MPNet	94.06	93.97	94.06	93.95
Logistic Regression	all-MiniLM-L6	94.06	94.03	94.06	94.05
CatBoost	MPNet	93.75	94.04	93.75	93.41
XGBoost	all-MiniLM-L6	93.75	93.67	93.75	93.57
CatBoost	all-MiniLM-L6	93.44	93.51	93.44	93.15
Naive Bayes	MPNet	93.44	93.33	93.44	93.27
Naive Bayes	all-MiniLM-L6	93.12	93.33	93.12	92.75
LightGBM	all-MiniLM-L6	93.12	93.01	93.12	92.93
AdaBoost	all-MiniLM-L6	93.12	93.01	93.12	92.93
Random Forest	MPNet	93.12	93.68	93.12	92.64
Random Forest	all-MiniLM-L6	93.12	93.49	93.12	92.69
Decision Tree	all-MiniLM-L6	88.44	88.50	88.44	88.47
Gradient Boosting	MPNet	88.12	87.75	88.12	87.86
Gradient Boosting	all-MiniLM-L6	87.81	87.46	87.81	87.58
Decision Tree	MPNet	85.00	85.68	85.00	85.28