

REPORT : Naive Bayes

Own implementation vs Scikit learn

Feature	Own	Scikit Learn
True positive	120	122
False positive	10	8
True negative	120	123
False negative	10	7
Accuracy	0.923	0.942
Precision	0.923	0.945
Recall	0.923	0.938
Time	0.116	0.0036
F1 score	0.923	0.942

Confusion Matrix

Own implementation

(predicted)	(actual)	
	Spam	Not Spam
Spam	120	10
Not Spam	10	120

Scikit Learn

(predicted)	(actual)	
	Spam	Not Spam
Spam	122	7
Not Spam	8	123

Inferences:

- Scikit Learn performs better both in time and accuracy
- Algorithm seems to be pretty accurate in both the cases.