

Project 4: Spam Detection using NB

1) What is a spam filtering algorithm?

: Naive Bayes (Multinomial)

2) Performance of the model in terms of different evaluation metrics such as confusion matrix, precision, recall, and F1-score

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		precision	recall	f1-score	support
	ham	0.98	0.99	0.99	1587
	spam	0.96	0.90	0.93	252
	accuracy			0.98	1839
	macro avg	0.97	0.95	0.96	1839
	weighted avg	0.98	0.98	0.98	1839

3) Explain how you can improve the performance of the algorithm

: My decision to improve this model performance is to change alpha value in hyperparameter and see if the recall of spam is increase as I expect or not, if not try to change as much as it can get the greatest value of spam recall.