

All words:

True Positives:321

True Negatives:396

False Positives:5

False Negatives:80

Lowercase:

True Positives:313

True Negatives:397

False Positives:4

False Negatives:88

To:/From:/Cc:/Subject:

True Positives:357

True Negatives:350

False Positives:51

False Negatives:44

Naïve Bayes performed accurately, supposing that some percentage of false positives/negatives is acceptable. "All words" classification is fairly accurate regardless of case sensitivity, though it is a little better at identifying ham than spam.

To:/From:/Cc:/Subject classification is pretty good, too, only slightly less accurate than classifying by "all words." But it's faster and still mostly accurate. To improve the method, I would use both together. With spam, prefer the text of the

To:/From:/Cc:/Subject line in computing the final probability, and with ham use the whole text. Case sensitivity was not very significant, so I'd make everything lower-case to have a smaller vocabulary hashtable.