It would be interesting to investigate different types of cascaded classifiers using the concept of multi-stage filter, with the aim of improving both the accuracy and reducing the FPR. Further work could also include the investigation of the effects of different forms of term weighting, similarity measures and formal neighbourhood algorithms on the performance of the Naïve Bayes Classifiers.

References

1. P. Graham. "A Plan for Spam". Internet: `http://www.paulgraham.com/spam.html`, Aug 2002 [Apr, 2011].
2. J.A. Zdziarski. Ending spam : Bayesian content filtering and the art of statistical language classification. (1st ed). San Fransisco, CA: No Starch Press (2005)
3. W. M. Camhinas, T.S. Guzella. "A review of machine learning approaches to Spam filtering". Expert Systems with Applications. vol 36 (7), pp. 10206-10222 (2009)
4. D.D. Lewis. "Naïve Bayes Text Classification for Spam Filtering" in ASA Chicago Chapter Spring Conference, Loyola Univ. (2007)
5. R. Rizvi. "Spam Filter ; Using Data Mining techniques to counter Spam". Internet: `http://raza-rizvi.blogspot.com/2010/03/creating-spam-filter-usingnaive-bayes.html`, Mar 2010, [Apr 2011]
6. V. Metsis, I. Androutsopoulos, G. Paliouras. Spam filtering with Naïve Bayes Which Naïve Bayes? in The Third Conference on Email and Anti- Spam (2006)
7. C.L. Giles, A. Kolcz, Y. Song. "Better Naïve Bayes classification for high-precision spam detection". Software-Practice and Experience. vol 39(11), pp. 1003-1024 (2009)
8. A. Sharma, K. Paliwal. "Detecting masquerades using a combination of Naïve Bayes and weighted RBF approach". Journal in Computer Virology, vol 3(33), pp. 237-245 (2007)
9. T. Mitchell. Machine Learning. (1st ed). McGraw-Hill Science/Engineering/Math, pp. 154-184 (1991)
10. W. M. Bolstad, Introduction to Bayesian Statistics. Hoboken, NJ: John Wiley & Sons, Inc, pp. 62-108 (2004)
11. A. Asuncion, A. Frank. UCI Machine Learning Repository Internet: `http://archive.ics.uci.edu/ml` University of California, Irvine, CA [Apr 2011].
12. S. Alag. Collective Intelligence in Action. (1st ed). Greenwich, CT: Manning Publications Co., pp. 173-306 (2009)
13. T. Fawcett. ROC Graphs: Notes and Practical Considerations for Researchers. Kluwer Academic Publishers. (2004)