- **Combining Naïve Bayes and decision tree for adaptive Intrusion Detection by Dewan Md. Farid, Nouria Harbi, and Mohammad Zahidur Rahman:** In this paper, the authors propose a new learning algorithm for adaptive network intrusion detection using Naive Bayesian Classifier and decision tree, which performs balance detection and keeps false positives at acceptable level for different types of network attacks, and eliminates redundant attributes as well as contradictory examples from training data that make the detection model complex. The proposed algorithm also addresses some difficulties of data mining such as handling continuous attribute, dealing with missing attribute values, and reducing noise in training data.

   The authors tested the performance of their proposed algorithm with existing learning algorithms by employing on the KDD99 benchmark intrusion detection dataset.

- **An empirical study of the Naive Bayes Classifier by Irina Rish :** In this paper, Monte Carlo simulations were used to conduct a systematic study of classification accuracy for several classes of randomly generated problems. It also analyzes the impact of the distribution entropy on the classification error, showing that low-entropy feature distributions yield good performance of Naïve Bayes. It also shows that the Naive Bayes works with both independent features and functionally dependent features.

   The most important part that the paper discusses is the characteristics of the input data and its effect on the Naive Bayes classifiers performance. The author presents a challenge that the accuracy of the performance depending on the features in a NBC can only be proved my practical implementation of the NBC and proving it with specific inputs. With this, the proposed system has safely assumed these assertions and will be using the Naive Bayes Classifier without a distinction between independent assumptions and functionally dependent assumptions.