

cs760hw2

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Part 2 PR curve answer

My computed values for the PR curve are incorrect. With that being said, I can speak about what would hypothetically occur.

The TAN should have higher predictive power than the naive Bayes should. The reason for this is that TAN incorporates the influence of other features on their probability of occurring. This is why we calculate the conditional mutual information. Conversely, the naive method only looks at the probabilities of each feature with respect to the classes individually.

If it is true that TAN is superior to the naive method (which I need to assume to answer this question because of my incorrect values), the the the PR curve for TAN will be less concave upward than the naive method. In other words, TAN should have a closer number of predicted positives to that of the actual positives than the naive method.