

## Chance Hope

### Problem 1

I think that the machine learning program will be able to make some decent predictions because there is some correlation between whether the coupon was used and several other categories. Such as how far away the place to use the coupon is, how often the customer goes to bars and coffee shops, and what type of coupon they were given.

### Problem 2

The most effective method to predict which customer would use the given coupon was the Random Forest method. Using the given data set of customers information, the algorithm was only misclassified who used the coupon 941 times out of a total 12079 samples. This is an accuracy of 92% and would provide a very high success rate for coupon usage if the customer, and the coupon they are offered, were selected according to this algorithm.