Anay Gupta CSE 494: Al for Cyber Security Shakarian - Friday 1 pm February 15th, 2019

## **CSE 494 Lab 3 Exercises**

1. Using a 5-fold cross validation on the dataset using a Decision Tree Classifier with the only parameter criterion set to entropy, the following measurements are obtained on the negative class (label = 0):

Precision = 0.83182 Recall = 0.82149 F1 Measure = 0.82626

2. Using a 70-30 split validation on the dataset using a Random Forests classifier with parameter criterion set to entropy and number of estimators set to 100, the following measurements are obtained on the positive class (label = 1):

Precision = 0.33333 Recall = 0.04347 F1 Measure = 0.07692

3. Using a 5-fold cross validation on the dataset using a Logistic Regression Classifier with C set to 1, the following measurements are obtained on the positive class (label = 1):

Precision = 0.20000 Recall = 0.00465 F1 Measure = 0.00909