**Homework 4**

**AAI 627 WS1**

ROC of the predictor matrix

A graph of a curve

Description automatically generated with medium confidence

0.9910907636852536 ~ 0.9911

ROC of the new Predictor matrix

A graph of a curve

Description automatically generated

0.797472916978683 ~ 0.7974

AUC of the predictor matrix is 0.9911

AUC of the new predictor matrix is 0.7974

The difference is 0.1937

Different features will change the AUC with the testing set of data.

The AUC with the top 10 selected features: 0.9110648494833009