# Prediction Error SVM ROC Results
## Hunter Kippen

After rerunning the prediction error sequence generator using the updated h264poker, I constructed two SVMs from both the old datasets and the new datasets. Please see the following graphs:



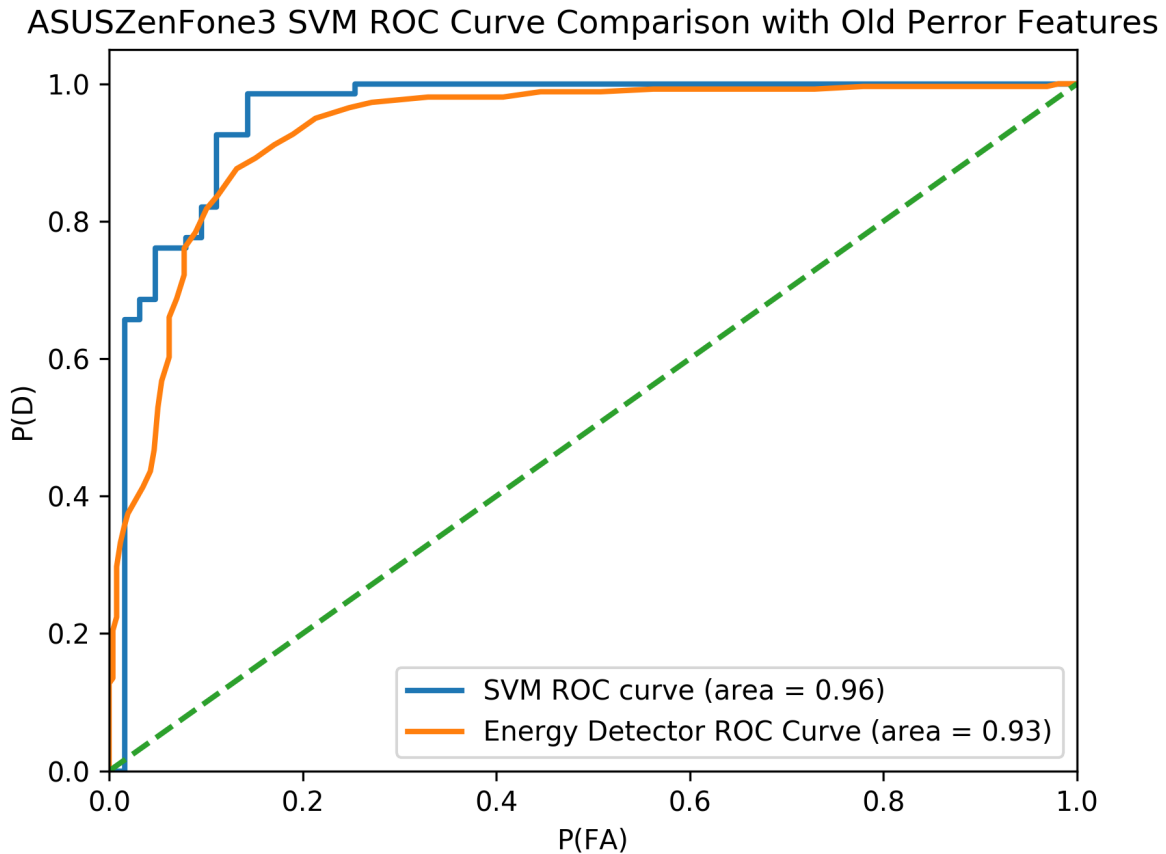ASUSZenFone3 SVM ROC Curve Comparison with Old Perror Features

Figure 1: ASUS ZenFone 3 SVM ROC Curve for Old h264poker Version

As these graphs can show, the use of an SVM, improves detector performance by a decent amount. For the new prediction error features, the SVM even makes the energy based detector (which was worse than random chance) significantly better. It may turn out that there are other features that can be used in the new prediction error calculations that may indeed improve performance beyond the SVM from the old calculations.
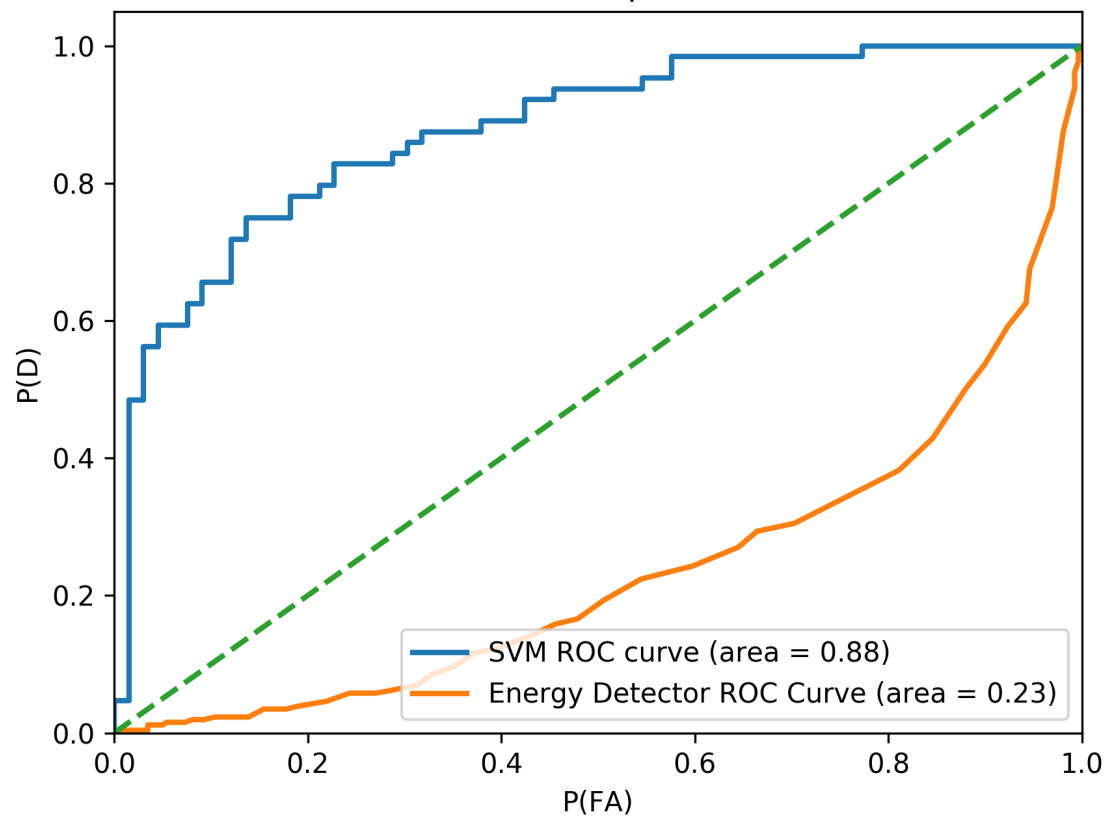
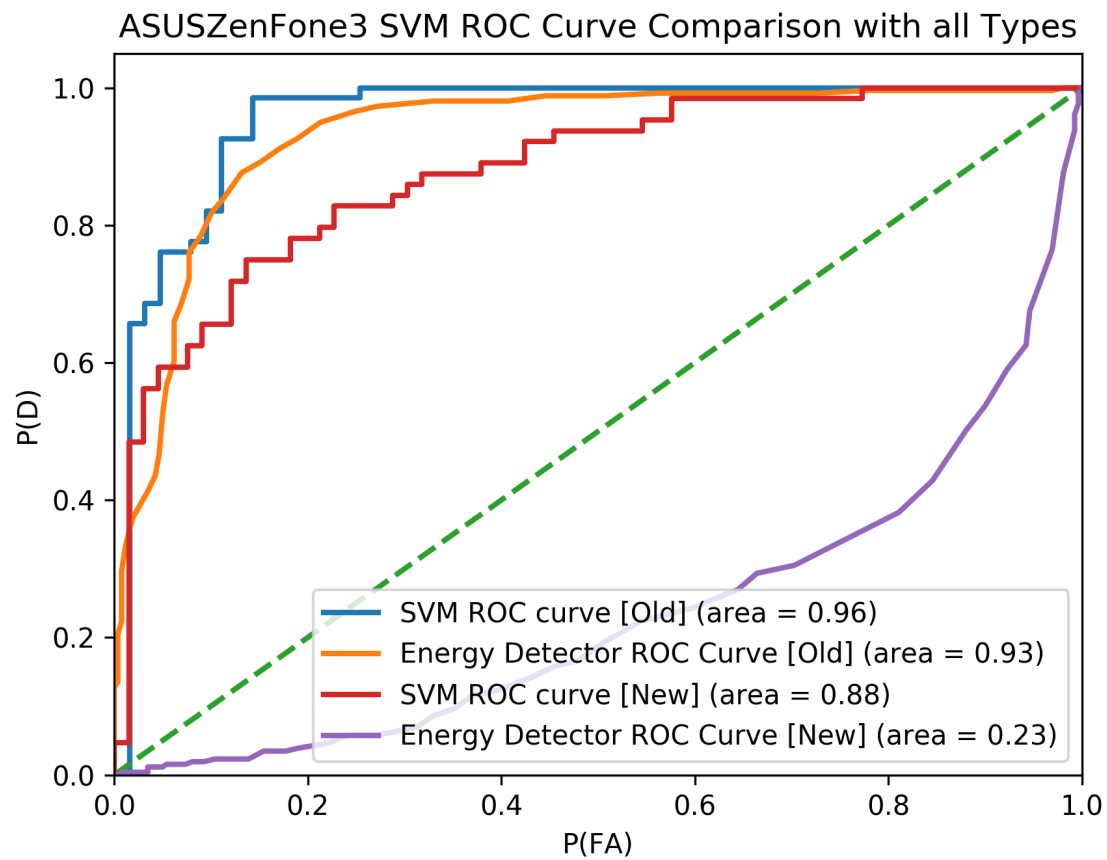Figure 2: ASUS ZenFone 3 SVM ROC Curve Comparison for New h264 poker Version

Figure 3: ASUS ZenFone 3 New Vs. Old ROC Curve Comparison