

## Autoencoder Output Summary

**Accuracy score**  $(TP+TN)/ALL$  : Percentage of test set tuples that are correctly classified

0.9531442013974228

**Precision score**  $(TP / (TP+FP))$ : what % of tuples that the classifier labeled as positive are positive

0.03135253372220197

**Recall score/ sensitivity**  $TP/(TP+FN)$ : what % of positive tuples did the classifier labeled as positive

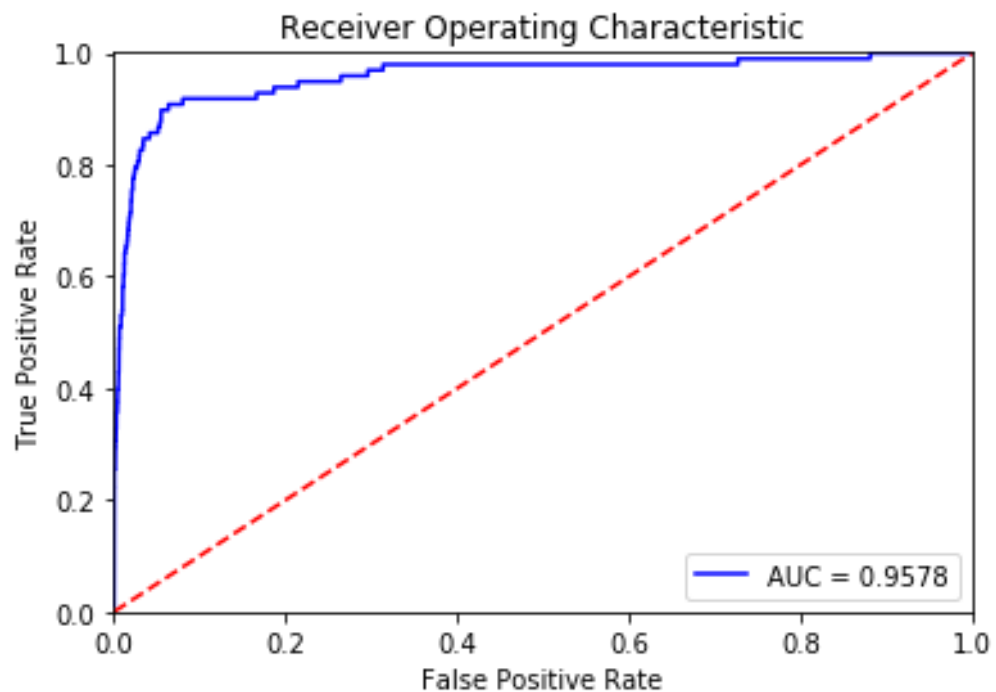
0.8775510204081632

**F1 score**: harmonic mean of precision and recall

0.06054206265399507

### Notes:

This is a highly imbalanced data so this autoencoder classifier can obtain good recall but with very low precision. The false positive rate does not drop when the total real negatives are bigger, precision is highly sensitive to false positives and is not impacted by a large total real negative denominator.



Confusion Matrix on Binary Classification:

Actual class\Predicted class	C	$\neg C$
C	True Positives (TP)	False Negatives (FN)
$\neg C$	False Positives (FP)	True Negatives (TN)

