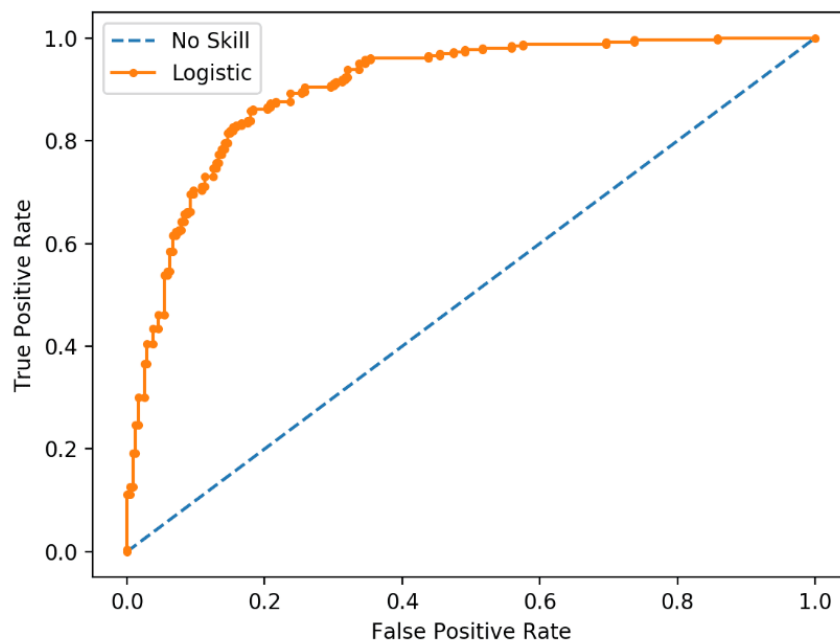


Difference between AUC and AUPRC:

AUROC is the area under the curve where x is false positive rate ($FPR = \frac{FP}{FP+TN}$, total number of false positive predictions divided all examples in the negative class) and y is true positive rate ($TPR = \frac{TP}{TP+FN}$, total number of true positive predictions divided all examples in the Positive class).

We can think of the plot as the fraction of correct predictions for the positive class (y-axis) versus the fraction of errors for the negative class (x-axis).

Ideally, we want the fraction of correct positive class predictions to be 1 (top of the plot) and the fraction **of** incorrect negative class predictions to be 0 (left of the plot). This highlights that the best possible classifier that achieves perfect skill is the top-left of the plot (coordinate 0,1).



AUPRC is the area under the curve where x is recall ($\frac{TP}{TP+FN}$) and y is precision ($\frac{TP}{TP+FP}$).

Both the precision and the recall are focused on the positive class (the minority class) and are unconcerned with the true negatives (majority class).