**3.2.4     Model Training and Evaluation (32%)**

Describe the training process, including the parameters involved and how they fit, concerns about underfitting and/or overfitting, and concerns about the convergence of the optimisation. Describe the hyperparameter selection and tuning process, including the hyperparameters involved and how they were selected and tuned, the candidate values that were considered, and the performance metric that were used for optimisation. Describe the evaluation metrics and explain why they are appropriate.

Two types of evaluation metrics will be used on each algorithm, they are used to measure the performance of the algorithm.

1. ROC (Receiver Operator Characteristic) & AUC(area under curve)

Measure a classifier’s ability to differentiate between each class in balanced classification

1. Precision, Recall and f1 score, using macro average

Focus on decreasing the false positives of a single class: **Precision** for that class

Focus on decreasing the false negatives of a single class: **Recall** for that class.