

3.2 Making predictions using a machine learning model

Now we've got a trained model, one which has hopefully learned patterns in the data, you'll want to use it to make predictions.

Scikit-Learn enables this in several ways. Two of the most common and useful are `predict()` and `predict_proba()`.

Let's see them in action.

Use a trained model to make predictions

```
clf.predict(X_test)
```

```
array([0, 1, 1, 0, 1, 1, 1, 0, 0, 1, 1, 0, 1, 0, 1, 1, 1, 0, 0, 0, 0, 0,
       1, 1, 1, 1, 1, 1, 0, 1, 0, 0, 0, 0, 1, 0, 1, 1, 1, 1, 1, 1, 1,
       1, 0, 1, 1, 0, 0, 0, 0, 1, 1, 0, 0, 0, 1, 0, 0, 0])
```

Given data in the form of `X`, the `predict()` function returns labels in the form of