

PERFORMANCE MATRICS FOR REGRESSION

(I) Mean Square Error (MSE)

↳ sklearn.metrics

↳ mean_squared_error

(II) Mean Absolute Error (MAE)

↳ mean_absolute_error

(III) Root Mean Square Error

$rmse = \text{mean_squared_error}$

(y-test, y-pred, squared = False)

(IV) $R^2 \Rightarrow$ Act as accuracy in Regression model

↳ sklearn.metrics

↳ r2_score

(v) Adjusted R^2

↳ import ~~r2~~ r2_score

$$\text{adjust_r2} = 1 - \frac{(1 - r2_score^2)(n-1)}{n-p-1}$$

no. of + feature

Q Which one to use when?

(i) → MSE / RMSE ⇒ If large error matter more

(ii) MAE ⇒ If you want an error measure that is robust to outliers

(iii) R^2 ⇒ check how well the model explain the variance

(iv) Adjusted R^2 ⇒ If using multiple features