

Accuracy: measure of exactness

A
8533

P
8534.5

closeness b/w Actual v/s predicted

$$E = \frac{1}{n} \sum_{i=1}^n (y_i - \hat{y}_i)^2$$

Error magnitude gets impacted by level of target attribute

① Predicting price of a pen
\$5 to \$2000
 $E = \$500$

② Predict price of a house
\$100k to \$900k
 $E = \$1000$

Coefficient of
determination

$$R^2_{\text{score}} = 1 - \frac{\text{MSE}}{\text{VAR}} = 1 - \frac{\frac{1}{n} \sum (y - \hat{y})^2}{\frac{1}{n} \sum (y - \bar{y})^2}$$

$y = \text{Actual}$, $\hat{y} = \text{predicted}$
 $\bar{y} = \text{mean of } y$