Linear Regression

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Actual → 469

Prediction → 467

In case of regressions models we can not expect exactness in predictions

Accuracy → measure of exactness

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

Error gets impacted by level of target attribute

y_i → Actual, $\hat{y}_i$ → Predicted

Case1 Predict price of a house	case2 - Predict price of a pen
$100 to $900K	$5 to $2000
E = $2000	E = $500

$$r^2 \text{ score} = 1 - \frac{MSE}{VAR}$$

MSE - high, VAR - small

y = Actual

$\hat{y}$ = prediction

$\bar{y}$ = mean of y

$$r^2 = 1 - \frac{\frac{1}{n}\sum(y - \hat{y})^2}{\frac{1}{n}\sum(y - \bar{y})^2}$$