

Variance: Spread or dispersion of a set of data points around its mean (average).

$$\text{variance} = \sum_{i=0}^n \frac{(x_i - \bar{x})^2}{n}$$

$x_i$  = each value in a dataset.

$\bar{x}$  = average

$n$  = total data points.

Standard Deviation :- quantifies the amount of variation or dispersion of a set of data values around its mean (average).

$$S.D = \sqrt{\text{variance}}$$