

* Normalization

Normalization is a technique often applied as part of data preparation for machine learning. The goal of normalization is to change the values of numeric columns in the dataset to use a common scale, without distorting differences in the ranges of values or losing information.

* MinMaxScaling

Min-Max scaling is a way to transform your data so that it fits within a specific range, typically between 0 & 1.

Imagine you have a bunch of numbers, and you want to squeeze them into a specific range like putting them all in a box that goes from 0 to 1. Min max scaling does this by subtracting the smallest no. from all the numbers & then dividing by the difference between the largest & smallest numbers.

$$\text{Scaled Value} = \frac{(x - \text{Min})}{(\text{Max} - \text{Min})}$$

where,

x is original data point

Min is smallest value in your dataset

Max is the largest value in your dataset