

MIN MAX SCALER

Donnerstag, 21. November 2024 10:20

1. Min-Max Scaler

How it works:

Transforms the data so that all values are rescaled to fit within a specified range, typically between 0 and 1.

Steps:

1. Find the minimum and maximum of the data:

$$\min = \min(x), \quad \max = \max(x)$$

2. Rescale each data point:

For every x_i in the dataset:

$$x'_i = \frac{x_i - \min}{\max - \min}$$

3. If scaling to a different range, such as [a, b]:

Use:

$$x'_i = a + \left(\frac{x_i - \min}{\max - \min} \right) \cdot (b - a)$$

Use Case: When all features need to be scaled to the same range, e.g., for neural networks or models sensitive to feature magnitudes.