Scaling to median and IQR

Robust Scaling

$$X\_scaled = \frac{X - median(X)}{75th\ quant(X) - 25th\ quant(X)}$$

Robust Scaling: example

Price
100
90
50
40
20
100
50
60
120
40
200

Median = 60
25th quantile = 45
75th quantile = 100
IQR = 100 − 45 = 55

→

$$\frac{\text{Obs. - Median}}{\text{IQR}}$$

Price
0.73
0.55
-0.18
-0.36
-0.73
0.73
-0.18
0.00
1.09
-0.36
2.55

Robust Scaling: summary

- Median centred at zero

- Handles outliers

Accompanying Jupyter Notebook

- Read the accompanying Jupyter Notebook

- Robust Scaling with Scikit-learn

THANK YOU

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