

CORRELATION

(Pearson's R)

$$\text{Cor}(X, Y) = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2} \sqrt{\sum (y_i - \bar{y})^2}}$$

Annotations for the formula:

- x_i : value of x_i
- \bar{x} : mean of x
- y_i : value of y_i
- \bar{y} : mean of y

Ranges between -1.0 and +1.0. The closer to 0.0 the less linear dependence between variables.