

Variances of 1D data sets

Given a data set $\mathcal{D} = \{x_1, \dots, x_N\}$, $x_n \in \mathbb{R}$, we compute the variance of the data set as

$$\mathbb{V}[\mathcal{D}] = \frac{1}{N} \sum_{n=1}^N (x_n - \mu)^2$$

where μ is the mean value of the data set.