

Symbols

Chapter 1

1. R^k = k -dimensional Euclidean space
2. $\text{diam}(A)$ = the diameter of the set A . = $\sup \{\|x - y\| : x, y \in A\}$
3. I_A = the indicator function of the set A
4. S^{k-1} = the surface of the unit sphere in R^k
5. E = the expectation operator
6. $\text{Var}[X] = E \left[(X - E[X])^2 \right]$
7. $\text{Sd}[X] = \sqrt{\text{Var}[X]}$
8. $\text{CV}[X] = \text{Sd}[X] / E[X]$
9. $\text{Cov}[X, Y] = E[(X - E[X])(Y - E[Y])]$
10. $\text{Corr}[X, Y] = \text{Cov}[X, Y] / (\text{Sd}[X] \text{Sd}[Y])$