Machine Learning Foundations

Chapter 6: Probability

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Conditional Probability

Variance : Properties

$$\text{Var}[X] : E X^2 - (E X)^2$$

i) $\quad \text{Var}[a X] : a^2 \text{Var}[x]$

ii) $\quad \text{Var}[X+Y] : \text{Var}[x] + \text{Var}[y] + 2 * \text{Cov}[X,Y]$

Sum of Independent Random Variables