

Errata for “Notes on probability theory and probabilistic Machine Learning”

Alessio Benavoli

September 11, 2020

Chapter 1

- pag.9,

$$\begin{aligned} p(x \in \{2, 4, 6\}) &= \sum_{x \in \{2, 4, 6\}} p(x = x) \\ &= p(x = 2) + p(x = 4) + p(x = 6) = \textcolor{red}{0.51}, \end{aligned}$$

- pag.10,

$$p(x \in \{1, 3, 5\}) = 1 - p(x \in \{2, 4, 6\}) = \textcolor{red}{0.49}$$

- pag. 15, What is $p(y = 1)$?

$$\begin{aligned} p(y = 1) &= \sum_{x \in \{H, T\}} p(x = x, y = 1) \\ &= p(x = H, y = 1) + p(x = \textcolor{red}{T}, y = 1) = 0.2. \end{aligned}$$

- pag. 16, equation (1.7) should be

$$p(x = x|y = y) = p(x = x)$$

- pag. 17, the same typo above occurs in

$$\begin{aligned} p(y = i) &= \sum_{x \in \{H, T\}} p(x = x, y = i) \\ &= p(x = H, y = i) + p(x = \textcolor{red}{T}, y = i). \end{aligned}$$

- pag. 22, “In practice, we sum all the rows in the table that include the instance $s = \textcolor{red}{1}$ (colored rows in the following table):”