Errors And Typos

Machine Learning: An Applied Mathematics Introduction
by Paul Wilmott

Most of these have been corrected for the latest printing. Note that page numbers might differ slightly between printings.

Page 5, line 5 'Its colour...'

Page 16, in Further Reading, should be '...mathematical-modeling methods then you can't do much better *than* reading all ...'
(Thanks to DD.)

Page 23, Eqn (2.3) should read

$$\sigma = \sqrt{\frac{1}{N}\sum_{n=1}^{N}(x_n - \mu)^2}.$$

(Thanks to SM.)

Page 26 Caption to Figure 2.4 '...TN = True Negatives...' (Thanks to ME.)

Page 48 Para below figure 2.22. There is a missing minus sign, it should read

$$-p\log_2(p) - (1-p)\log_2(1-p).$$

(Thanks to HD.)

Page 69 Equation should read

$$\text{Distance}^{(n,k)} = \sqrt{\sum_{m=1}^{M}\left(x_m^{(n)} - c_m^{(k)}\right)^2} \quad \text{for } k = 1 \text{ to } K.$$

(Thanks to ME again.)

Page 120, line -4 'In Figure 8.5 ...' (Thanks to MP.)

Page 154, Figure 10.5, the formula should be

$$\sum_{j=1}^{J_{l-1}} w_{j,j'}^{(l)} a_j^{(l-1)} + b_{j'}^{(l)}.$$

Page 160 bottom, and top of page 161, the logarithms are in the wrong place in early printings. The expressions should be of the form

$$J = -\sum_{n=1}^{N} \left(y^{(n)} \ln \left(\hat{y}^{(n)} \right) + (1 - y^{(n)}) \ln \left(1 - \hat{y}^{(n)} \right) \right).$$

Page 176, MDP bullet point. Knowing the positions of the pieces in a game of chess is *not* quite enough. Castling messes this up. You'd need a flag to keep track of whether each side has castled or not. (Thanks to CC.) But then there is also the repeated position rule allowing a draw to be claimed. That's harder to deal with.

Page 200, line -10 'be be' (Thanks to CS. These are often the hardest errors to spot.)