Errata for *Machine learning with neural networks*
Bernhard Mehlig, Cambridge University Press (2021)

p. 32	l. 11	'$w_{ii} > 0$' should be replaced by '$w_{ii} = 0$'.
p. 32	l. 21	should read: '$H = -\frac{1}{2}\sum_{ij} w_{ij} g(b_i)g(b_j) - \int_0^{b_i} \mathrm{d}b\, b\, g'(b)$, with $b_i = \sum_j w_{ij} n_j - \theta_i$, cannot increase…'.
p. 37	l. 16	replace '$\sqrt{N}$' by '$N^{-1/2}$'.
	l. 17	replace '$\langle b_i(t)\rangle \sim N$' by '$\langle b_i(t)\rangle = O(1)$'.
p. 48	eq. (4.6)	replace '$\langle n_i\rangle$' by '$\langle s_i\rangle$'.
p. 54	eq. (4.5c)	replace '$-\beta\, b_m$' by '$2\beta\, b_m$'.
p. 55	eq. (4.5d)	replace '$\beta\, b_m$' by '$-2\beta\, b_m$'.
p. 61	eq. (4.18)	the sum should be over *distinct* patterns $\boldsymbol{x}$.
p. 67	alg. 3	add superscripts '(μ)' to 'δw_{mn}', '$\delta\theta_n^{(\mathrm{v})}$', and '$\delta\theta_n^{(\mathrm{h})}$'.
p. 72	l. 12	the list should read '$1, 2, 4$, and 8'.
p. 85	fig. 5.11	switch the labels '10' and '50'.
p. 93	fig. 5.22	switch the labels '1111' and '1101' in the right panel.
p. 97	eq. (6.6a)	insert '$V_n^{(\mu)}$' before the '$\equiv$' sign.
p. 106	l. 18	should read 'a compromise, reducing the tendency of the network to overfit at the expense of training accuracy'.
p. 117	fig. 7.5	the hidden neurons should be labeled '$j = 0,1,2,3$' from bottom to top.
p. 118	fig. 7.6	exchange labels '1' and '2'.
	eq. (7.9)	should read '$O_1 = \mathrm{sgn}(-V_0 + V_1 + V_2 - V_3)$'.
p. 121	fig. 7.10	change '$w^{(L-2)}$' to '$w^{(L)}$'.
p. 122	eq. (7.17)	replace '$\mathbb{J}$' by '$\mathbb{J}'$', also in the two lines above the equation.
p. 123	eq. (7.19)	should read '$\boldsymbol{\delta}^{(\ell)} = \boldsymbol{\delta}^{(L)}\mathbb{J}_{L-\ell}$ with $\mathbb{J}_{L-\ell} = [\mathbb{D}^{(L)}]^{-1}\mathbb{J}'_{L-\ell}\mathbb{D}^{(\ell)}$'.
p. 131	eq. (7.45)	replace 'O_l' by 'O_i'.
p. 139	l. 33	replace 'the Lagrangian (7.57)' by '$\frac{1}{2}\delta\boldsymbol{w}\cdot\mathbb{M}\delta\boldsymbol{w}$'.
p. 160	l. 15	delete 'then $L_{ij} = \delta_{ij}$. In this case'.
p. 161	l. 19	replace 'negative' by 'positive', and 'positive' by 'negative' in the next line.
p. 171	l. 23	the upper limit of the second summation should be 'M'.
p. 197	alg. 10	replace '$s_j = 0$' by '$s_j = 1$' in line 2 of Algorithm 10.
p. 202	l. 37	replace 'positive' by 'non-negative'.
p. 203	l. 21	should read 'Alternatively, assume that $\boldsymbol{w}^* = u + \mathrm{i}v$ can be written as an analytic function of $\boldsymbol{r} = r_1 + \mathrm{i}r_2$…'.
	l. 27	add 'See Ref. [2]'.
p. 204	l. 5	replace '$\sin(2\pi x_1)$' by '$\sin(\pi x_1)$'. Same in caption of fig. 10.17.
p. 225	l. 5,6	replace 'two' by 'two (three)' and 'lost' by 'lost (drew)'.

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