Boosting: Foundations and Algorithms by R. E. Schapire & Y. Freund — errata —

Last update: June 7, 2012

page	correction
82	theorem 4.6 : $ \mathcal{H} $ should be omitted from the second bound, which should instead read:
	$2T(\lg(2em/T) + d\lg(2em/d)) + 2\lg(2/\delta)$
	$\operatorname{err}(H) \leq \frac{2\Gamma(\operatorname{Re}(2nn/2) + \alpha \operatorname{Re}(2nn/2)) + 2\operatorname{Re}(2nn/2)}{m}.$
265	exercise 8.5(d) : RE ($\mathbf{p}_0 \parallel \mathbf{q}$) should instead be B _G ($\mathbf{p}_0 \parallel \mathbf{q}$).
266	exercise 8.7(a): The first part of the question should instead read, "Use exercise 8.5(d) to
	prove that"
407	exercise 12.2 : $\rho(x)$ should instead be redefined to be:
	$\rho(x) \doteq C(\pi(x), F(x)) - C_{\min}(\pi(x)).$
410	exercise 12.5: In parts (a) and (b), all occurrences of $\widehat{risk}(\cdot)$ should be replaced by
	$\ln\left(\widehat{risk}(\cdot)\right)$. In particular, the displayed equation in part (a) should read:
	() $()$ $()$ $()$ $()$ $()$ $()$
	$\ln\left(\operatorname{risk}(F_{t-1}+\alpha h)\right) \leq \ln\left(\operatorname{risk}(F_{t-1})\right) - \alpha \sum D_t(i)y_ih(x_i) + \frac{\alpha}{2}.$
	i=1
	And the displayed equation in part (b) should read:
	() $()$ $()$ $()$ $()$ $()$ $()$
	$\ln\left(\operatorname{risk}(F_t)\right) \leq \ln\left(\operatorname{risk}(F_{t-1})\right) - c_t \sum \sum w_j D_t(i) y_i h_j(x_i) + \frac{c_t}{2}.$
	i=1 $j=1$
	Finally, the expression appearing in the hint for part (b) should instead read:
	n
	$\sum w_j \ln \left(\widehat{\mathrm{risk}}(F_{t-1} + c_t \mathrm{sign}(w_j)\hat{h}_j)\right).$
	$\overline{j=1}$
426	equation (13.27) should instead read: $G(\mathbf{z}) = m\Lambda_t(\mathbf{s} + \mathbf{z})$.
427	equation (13.34) should include an additional factor of 1/2.
428	algorithm 13.1: the equation for $w_t(s)$ should include an additional factor of 1/2.
450	equation (15.00), and also the definition of $C_{\overline{T}}$ at the very bottom of the page should both include additional factors of $1/2$
487	Exercise 14.3(c): The very last sentence should read "Also show that this solution is unique
40/	except possibly when $\tau' = 1$ "
	except possibility when $r = 1$.