### Boosting: Foundations and Algorithms
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— errata —

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<table>
<thead>
<tr>
<th>page</th>
<th>correction</th>
</tr>
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</table>
| 82   | **Theorem 4.6:** $|\mathcal{H}|$ should be omitted from the second bound, which should instead read:  
$$
\text{err}(H) \leq \frac{2T\log(2em/T) + d\log(2em/d)}{m} + 2\log\left(\frac{2}{\delta}\right).
$$  |
| 265  | **Exercise 8.5(d):** $\text{RE}(p_0 \parallel q)$ should instead be $B_G(p_0 \parallel q)$. |
| 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:  
$$
\rho(x) \equiv C(\pi(x), F(x)) - C_{\min}(\pi(x)).
$$  |
| 410  | **Exercise 12.5:** In parts (a) and (b), all occurrences of $\text{risk}(\cdot)$ should be replaced by $\ln\left(\overline{\text{risk}}(\cdot)\right)$. In particular, the displayed equation in part (a) should read:  
$$
\ln\left(\overline{\text{risk}}(F_{t-1} + \alpha h)\right) \leq \ln\left(\overline{\text{risk}}(F_{t-1})\right) - \alpha \sum_{i=1}^{m} D_t(i)y_i h(x_i) + \frac{\alpha^2}{2}.
$$  And the displayed equation in part (b) should read:  
$$
\ln\left(\overline{\text{risk}}(F_t)\right) \leq \ln\left(\overline{\text{risk}}(F_{t-1})\right) - c_t \sum_{i=1}^{m} \sum_{j=1}^{n} w_j D_t(i) y_i \hat{h}_j(x_i) + \frac{c_t^2}{2}.
$$  Finally, the expression appearing in the hint for part (b) should instead read:  
$$
\sum_{j=1}^{n} |w_j| \ln\left(\overline{\text{risk}}(F_{t-1} + c_t \text{sign}(w_j) \hat{h}_j)\right).
$$  |
| 426  | **Equation (13.27):** should instead read: $G(z) = m\Lambda_t(s + z)$. |
| 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 (13.66), and also the definition of $C_\tau$ 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, except possibly when $\tau' = 1$.?” |