

for the first edition of:
Methods for Computational Gene Prediction

Found an error? Please report it!

From the Preface: *“Though it is my hope that the number of typographical and/or factual errors in this text will be found to be small, I have greater hopes that readers of this first edition will send me their corrections so that they may be incorporated as appropriate into the next edition.”* (MCGP, page xv)

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Page numbers refer to the first edition. Sources for contributed corrections are cited in brackets.

p1: “primarily biochemical products” should read “primary biochemical products” [error found by the author]

p10: (Table 1.1) Codons `TTC` and `TTT` should not be listed under glutamic acid (amino acid code E) (error introduced by publisher during typesetting). Also, codon `TTG` is missing from the list for leucine (amino acid code L) (error introduced by author). [errors found by the author]

p55: The sentence regarding rejection regions and Type I errors is stated incorrectly. It should instead say: “If we set $\alpha=5\%$, then we can expect that of the true null hypotheses that we test, roughly 5% will be rejected, which would constitute Type I errors.” Also, the word “assess” in the following sentence should instead say “control.” [error found by the author]

p126: The test `if orfsOverlap(ω_1, ω_2)` in Algorithm 5.5 (also 5.7, 5.9, 5.12) should include an additional test for $\omega_1 \neq \omega_2$. [error found by Rob Patro]

p130: The entropy-based discussion of codon bias scores on this page and on p132 is, unfortunately, misleading, since the maximization is over the p_i 's rather than the q_i 's. Thus, while the codon bias score is indeed a negative cross entropy (as stated), it does not achieve its maximum when all $p_i = q_i$. This behavior can, however, be achieved by switching the p_i 's and q_i 's in the scoring function so as to achieve true cross-entropy minimization. [error found by author]

p141: $P(\phi_{i,k}, S_{i..k})$ should be $P(\phi_{i,k}, S_{0..k})$. [error found by the author]

p206: the phrase “The dependency structure of such a graph is valid insofar as” should have a footnote attached to it which reads “This is generally only true of tree-structured networks. A

more fully general characterization of the relationship between directed and undirected graphical models needs to take into consideration the notion of *d-separation*, which is beyond the scope of this book. See, e.g., (Pearl, 1991).” [error found by the author]

p310: labels “parent” and “child” in the matrix should be reversed (error introduced by publisher during typesetting). [error found by the author]

p313: “Davidson” should be spelled “Davidon” (similarly for the index entry on p411). Furthermore, the Powell method (which uses no gradients) and the Davidon-Fletcher-Powell method (which does use gradients) are distinct methods; PH03 appears to use the former, as originally stated. [error found by the author]

p332: “outside the subtree rooted at $parent(i)$, given the value of that parent attribute” should instead read: “outside the subtree rooted at X_i , given the value of $parent(i)$ ”. [error found by the author]

p384: θ should be ϕ in Eq. 12.3 (error introduced by publisher during typesetting) [error found by the author]
