Computational Phylogenetics: An introduction to designing algorithms for phylogeny estimation

Errata

1. The biosketch for Tandy Warnow (back cover and first page) has the wrong date for the election as Fellow of the Association for Computing Machinery (ACM). Instead of 2006, it should be 2015.

2. Page 74. Theorem 4.12 says that Maximum Compatibility MC is NP-hard, where the input is a set of binary characters. The theorem is correct but the proof is not, because I provided a reduction from Maximum Compatibility to Max Clique, and the reduction needs to be in the other direction – from Maximum Clique to Maximum Compatibility. The paper I cited has both reductions (one from Maximum Clique to Maximum Compatibility, and the other - which I provided - from Maximum Compatibility to Maximum Clique). You should see that paper for the reduction and proof.

3. Page 119. Homework problem 8, the string representation for trees T2 and T3 have an extra closing parenthesis “)”; the last parenthesis in each string should be removed.

4. The equation on page 157 for $FPA(v,x)$ is incorrect. Instead of

$$FPA(v,x) = \sum_{a \in \Sigma} [Pr(v = x | w_1 = a) \times FPA(w_1, a)] \times \sum_{a \in \Sigma} [Pr(v = x | w_2 = a) \times FPA(w_2, a)].$$

it should read

$$FPA(v,x) = \sum_{a \in \Sigma} [Pr(w_1 = a | v = x) \times FPA(w_1, a)] \times \sum_{a \in \Sigma} [Pr(w_2 = a | v = x) \times FPA(w_2, a)].$$

5. Page 176, Chapter 8, Homework problem 18. There are $2n - 1$ nodes in a rooted binary tree with $n$ leaves, and not $2n - 2$, as stated.