The Nature of Computation

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Errata of 1st printing

1. p. 89, Note 3.2: the last entry in the sequence should be 100
2. p. 90, "Cooley–Tuley" should be "Cooley–Tukey"
3. p. 123, Problem 4.16 should read "Prove that Independent Set and Vertex Cover are in P for bipartite graphs, and therefore that Clique is in P for graphs whose complement is bipartite."
4. p. 123, in Problem 4.17 the running time should be $2^k \mathsf{poly}(n)$ instead of $O(2^k n)$ to avoid worrying about the format of the input graph.
5. p. 174, "what loopholes might exist"
6. p. 189, "either other" should be "either order"
7. p. 361, "and $(\rho+1)n$ if it isn't" should be "and at least $(\rho+1)n$ if it isn't"
8. p. 383, "doesn't tell us much"
9. p. 492, Problem 10.9, "between a two" should be "between two"
10. p. 611, Fig. 12.24, labeled flow on the lower front right edge of the cube must be 1/6 instead of 1/3
11. p. 720, Note 13.6, found independently "by" the mathematical physicist...
12. p. 758, Exercise 14.11 refers to the equation for $q_\eta(\zeta)$ on the bottom of p. 757
13. p. 801, line 4, $\alpha_c < 1/\binom{k}{2}$ should be $\alpha_c \leq 1/\binom{k}{2}$
14. p. 803, Problem 14.28 refers to Eq. (14.45) and the equation for $q_\eta(\zeta)$ on the bottom of p. 757
15. p. 805, title of Problem 14.36 should be "Karp and Sipser find independent sets"

16. p. 807, end of Problem 14.36, "number of vertices" should be "fraction of vertices"

17. p. 827, $\langle v|\Pi|v\rangle$ in the denominator should be $\sqrt{\langle v|\Pi|v\rangle}$ (twice)

18. p. 829, "mathematically level" should be "mathematical level"

19. p. 833, citation should be removed from epigraph

20. p. 836, "each consist"

21. p. 839, "no matter which state we measure it in" should be "no matter which basis we measure it in"

22. p. 896, the second term in the last equation should be $|-\rangle \otimes |\psi_{\text{asym}}\rangle$

23. p. 897, Problem 15.36, should be $D|\psi\rangle = \sum_j a'_j|j\rangle$, and $1/(2\sqrt{N})$ can be improved to $\sqrt{2/N}$ when N is large