

**Algorithms: Sequential, Parallel, and Distributed**  
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**UPDATES TO THE TEXT 12/20/04**  
**With additions from UiO (INF 4130).**  
**Last updated 3. Sept. 2008**

- p. 42 line 8 change 1 to 0
- p. 56 Change “In Appendix D, we find an exact ... :” to “An exact ... is:”
- p. 57 Exercise 2.8 first n should be italic
- p. 58 Exercise 2.14 [ ] should be [ ]
- p. 66 After Proposition 3.1 ■ should be □
- p. 105 Delete the sentence on line 6 that begins “In Appendix D ...”
- pp. 106-107, O should be o in Exercises 3.13d,e, 3.15 and 3.16.
- p. 125 In second line of section 4.2.5, change “...which is proved in Appendix D...” to “...whose proof we omit ...”
- p. 166 Exercise 4.41 change 4.12 to 4.25
- p. 166 Exercise 4.42 change 4.13 to 4.26 and 4.18 to 4.41
- p. 169 line 1 change 1 to 0
- p. 171 After Theorem 5.1.1 ■ should be □
- p. 185 Exercise 5.8 should read “Show that *BingoSort* is not a stable sorting algorithm” (the word “not” was missing)
- p. 186 Exercise 5.11 roman m in 2<sup>nd</sup> line should be italic
- p. 204 Figure 6.2 *Link* in column  $i = 2$  should be changed from 4 to 7, and *Link* in column  $i = 3$  should be changed from 7 to 2
- p. 205 line 3 of 3<sup>rd</sup> paragraph, superscript  $j - 1$  should be  $i - 1$
- p. 205 line 3 of 4<sup>th</sup> paragraph, change “we assume” to “notice”
- p. 205 line 5 of 4<sup>th</sup> paragraph, superscript  $- 1$  should be  $n - 1$
- p. 207 line 1 of 2<sup>nd</sup> paragraph, change  $n]$  to  $n\}$
- p. 279 Subtract one from all the table entries of *Root*[ $i,j$ ] in the last three occurrences of this matrix. Also, change 4 to 3 in the first occurrence of this matrix.
- p. 279 change 110 to 135 in its two occurrences for entry *A*[1,3], and change 60 to 80 in its two occurrences for entry *Sigma*[1,3].
- p. 396 In Figure 13.1 arrow on edge 1,5 should be reversed
- p. 400 In Figure 3.2 arrow on edge 1,5 should be reversed
- p. 440/441:
  - Step 2-7: The edge 4-7 should be reversed in all *Nf*-s.
  - Step 1: The edge 4-7 in *Nf* shall be dotted.
  - Step 2: In the flow-graph the two inner edges should be removed
  - Step 2: The edge 0-3 in *Nf* shall be dotted
  - Step 7: Node 5 in *N* should have a double circle around it, and an edge directed from 2 to 5 should be added.
- p. 444, figure 14.10: Remove the edge  $(x_1, y_2)$  in the upper graph.
- p. 612 In second figure at the top, node 12 should be B not R
- p. 619 In the *BellmanFordDistributed*-program: Line 6 should be “forall v do”. Line 16 updates v:Dist. A similar line updateing v:Parent should be added.
- p. 638 Line 8 from bottom of “*CreateNext*” should be “j <- Next[j]”

- p. 639 Second comment in procedure CreateShift should be “of  $P[i]$  in  $P[0:m-1]$ ”.
- p. 639 Lines 2 and 3 from the bottom should be  $Shift(f) = 9$   
 $Shift(t) = 2$ .
- p. 646 Figure 20.7 The two “1”-nodes on level 2 of the tree should be merged into one.
- p. 722 Around Theorem 23.3.1:
- 3 lines above the theorem: You must let that the search go on until the queue is empty, and not stop the first time a goal node is found (e.g. assume that ‘a’ is a goal node in Fig. 23.5).
  - The paragraph below the theorem: When a node in the tree is corrected, it must also be re-queued (so that other nodes in the tree that are affected by the correction can also be corrected)
- p. 724 Line 11 from bottom: “path in G” should be “path in D”.
- Line 3 from bottom contains “ $h(v)+h(v)$ ”. This should be replaced by:  
“ $h(v) \leq g(v)+h(v)$ ”.
- p. 744 Patashnik reference, change 4 3 4 3 4 to  $4 \times 4 \times 4$  in both occurrences
- p. 896 insert sentence “If  $M$  is the matrix  $A_p$  associated with a Markov chain then it can be shown that all the eigenvalues are less than or equal to 1.” after the first sentence ending with “...its transpose  $M^T$ .” of the second paragraph.