Parallel Programming in C with MPI and OpenMP

Errata Sheet for First Printing

Page xiv, line 11: “Zemoudel” should be “Zemoudeh”

Page 32, line 15: “node(2, 1)” should be “node(1, 1)”

Page 33, line 5: “n/2” should be “n”

Page 37, Table 2.1, Butterfly: “n/2” should be “n”

Page 86, line 5: “χ(n/p)” should be “χ(n/p)(n - 1)”

Page 86, line 9: “χ(n/p)” should be “χ(n/p)(n - 1)”

Page 87, line 13: “4nβ_n” should be “4n/β_n”

Page 98, Figure 4.3: “65536” should be “65535”

Page 120, line 7: “(BLOCKLOW((id)+1) - BLOCKLOW(id))” should be “(BLOCKHIGH(id, p, n) - BLOCKLOW(id, p, n+1))”

Page 125, Figure 5.6, line 2: “2” should be “1”

Page 142, line 4: “a[k, k]” should be “a[i, k]”

Page 142, line 9: “a[k, j]” should be “a[k, k]”

Page 167, end of last sentence: replace “to be” with “is the total amount of idle and overhead time scaled by two factors: the number of processors (less one) and the sequential execution time.”

Page 167, last line: “ε = (σ(n) + κ(n, p))/T(n, 1)” should be

\[
e = \frac{(p - 1)\sigma(n) + pk(n, p)}{(p - 1)T(n, 1)}
\]

Page 168, line 2: “σ(n) + κ(n, p) = T(n, 1)ε” should be

\[
e = \frac{pT(n, p) - T(n, 1)}{(p - 1)T(n, 1)}
\]

Page 170: Change all four instances of “φ” to “φ”

Page 188, Figure 8.8

line -17: “(void *)” should be “(void **)”

lines -12, -6, and -4: variable “n” should be “m”

Page 197, Figure 8.14

line 23: “Cols of ’a’ and elements of ’b’” should be “Elements of ’c’”

lines -4, -3, and -2: variable “n” should be “m”

Page 198, Figure 8.14 (contd.)
line 1: “local_dls” should be “BLOCK_SIZE(id,p,n)”
lines 4, 5, and –4: variable “n” should be “m”

Page 249, line –8: “F(x) = 1 – e^{-mwx}” should be “F(x) = 1 – e^{-x/mw}”

Page 255, Figure 10.13, line –2: “a/n” should be “b/n”

Page 276, Figure 11.4, line 19: “ccol+nhalf[j]” should be “ccol+nhalf[j]”

Page 323, line –4: “14.2” should be “13.2”

Page 350, Exercise 14.2
line 1: “sorting four-byte” should be “sorting 100,000 four-byte”
line 6: “1 ≤ p ≤ 16” should be “p = 1, 2, 4, 8, 16”
line 9: “100 million” should be “100,000”
line 10: “1, 2, ..., 16” should be “1, 2, 4, 8, and 16”

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Page 352, Exercise 14.10c: “isoeficiency” should be “scalability function”

Page 359, line 2: First element of first column vector should be –1, not 1

Page 363, Figure 15.5: Assignment statement ω ← ω × ω_d should be between two prior “endfor” statements

Page 378, line –12: “Seijen” should be “Feijen”

Page 419, line –14: “[n/t] threads” should be “[n/t] iterations”

Page 421, line –14: The return type of function get_next_task should be struct task

Page 422, Figure 17.7: The task_ptr variables should point directly to the task structures, not to the elements of the job list.

Page 426, Figure 17.9: Add tid to the list of private variables in the first pragma

Page 515, Reference 21: “Seijen” should be “Feijen”

Inside back cover: Figure should be labeled “MAPPING STRATEGY DECISION TREE”