

Errata to the Second Printing of “Optimizing Compilers for Modern Architectures”

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Preface

P. xxv, line 15: insert “Guohua Jin,” between “Jacques-Olivier Haenni,” and “Mike Johnson”

Chapter 3

P. 80, Figure 3.1, line 5 from the bottom: “ ϵ ” should be “ \in ”

P. 84, lines 8-11: replace the sentence beginning “The weak SIV test...” with the following: “The weak SIV test can then be formulated as determining whether there exists an integral value m between the loop bounds and integral values i and i' such that $a_1i + c_1 = a_2i' + c_2 = m$, as shown in Figure 3.3.”

P. 89, line 23: “ $=$ ” should be “ $= \dots$ ”

P. 89, line 24: “ $=$ ” should be “ $\dots =$ ”

P. 94, line 19: “ n_b ” should be “ $-n_b$ ”

P. 104, line 1: “greater than 2” should be “greater than or equal to 2”

P. 109, line 27 (3 from the bottom): replace the entire line with the following (centered):

$$U_{10} = 100; U_{20} = -1; U_{21} = 1; L_{10} = L_{20} = 1; L_{21} = 0$$

P. 113, line 9: “is to the” should be “is the”

P. 124, lines 24 and 32: “**return** *depExists*;” should be “**return** *false*;”

P. 125, line 12: “**return** *depExists*;” should be “**return** *false*;”

Chapter 4

P. 144, Figure 4.2, lines 9 and 14: “ ϵ ” should be “ \in ”

P. 151, Figure 4.8, lines 6, 11, and 13: “ ϵ ” should be “ \in ”

P. 151, line 7 in Figure 4.8: insert a blank before the final occurrence of “ N ”

P. 169, line 25: “1, 000” should be “1000”

Chapter 6

P. 247, line 1: “ $N+1$ ” should be “ N ”

P. 247, line 3: “.LE.” should read “.LT.”

P. 279, line 2: “only “ $=$ ”” should be “only non-“ $=$ ””

P. 297, line 35 (third from bottom): “outer loop on \mathcal{J} ” should be “outer loop on \mathcal{K} ”

Chapter 7

P. 354, Figure 7.10: the “ $\{2\}$ ” next to node 5 should be removed

Chapter 8

P. 427, line 3: the “ENDDO” should be aligned with the “DO” in line 1

- P. 429, lines 10, 16 and 27: “1,000” should be “1000”
- P. 431, line 10: “1,000” should be “1000”
- P. 435, lines 19, 22 and 25: “1,000” should be “1000”
- P. 436, lines 1, 4, 7 and 8 (below Figure 8.24): “1,000” should be “1000”
- P. 450, lines 20 and 21 (below Figure 8.34): “1,000” should be “1000”
- P. 451, line 11 (below Figure 8.35): “1,000” should be “1000”
- P. 452, lines 3, 8, 19, 29 and 42: “1,000” should be “1000”
- P. 458, line 34: replace “are partially initialized at” with “have been initialized on some path to”

Chapter 9

- P. 488, third line from the bottom: delete the entire line, which currently reads:

$$A(I-1, J-1) = AINIT(I-1, J-1)$$

Chapter 11

- P. 551, line 25 (line 1 of Definition 11.2): “(s,x)” should be “(p,x)”
- P. 551, line 26 (line 2 of Definition 11.2): “to s” should be “to p”
- P. 576, Figure 11.9, line 11: indent the “CALL” to align with “W” on the previous line

Chapter 14

- P. 693, line 11: “A(I+1, J) + A(I+1, J)” should be “A(I-1, J) + A(I+1, J)”
- P. 696, line 15: “A(L:L+99), is” should be “A(L:L+99) is” (delete the comma)
- P. 696, line 25: “A(1, 100)” should be “A(1:100)”
- P. 697, line 36: “A(1, 100)” should be “A(1:100)”
- P. 705, line 6 and line 13: the character to the left of the “∈” should be “I”
- P. 708, line 7 and line 32: “ THEN)” should be “) THEN”
- P. 709, line 7 and line 28: “ THEN)” should be “) THEN”
- P. 714, line 11: “SEND(PID+1, B(100, J))” should be
“SEND(PID+1, B(100, J), 1)”
- P. 714, line 12: “SEND(PID+1, A(100, J))” should be
“SEND(PID+1, A(100, J+1), 1)”
- P. 715, line 2: replace “A(10000, 100)” with “A(10000, 1000)”
- P. 715, line 18: “RECV(PID-1, B(0, J), 1)” should be
“RECV(PID-1, A(0, J), 1)”
- P. 715, line 24: “SEND(PID+1, A(100, J+1))” should be
“SEND(PID+1, A(100, J), 1)”
- P. 721, after line 10: insert “UB = min(J+K-1, M)”
- P. 721, lines 12-13: replace the lines with:
RECV(PID-1, A(0, J:UB), UB-J+1)
DO j = J, UB
- P. 721, line 17: replace the line with:
DO j = J, UB
- P. 721, line 23: replace the line with:
SEND(PID+1, A(100, J:UB), UB-J+1)
- P. 722, line 7: insert a blank between the two characters in “-1” at the end of the line
- P. 722, line 8: insert a blank between the two characters in “+1” at the end of the line

- P. 724, line 17 (below Figure 14.5): replace “ $kP \neq 0$ ” with “ $rC \neq myC$ ”
- P. 729, line 22: “INHERIT X, Y;” should be “INHERIT X, Y”
- P. 733, Exercise 14.4, line 9: “1, N” should be “2, N”
- P. 734, Exercise 14.5, line 10: “1, N, K” should be “2, N, K”
- P. 734, Exercise 14.5, line 12: replace “ $II + K - 1$ ” with
“ $\min(II + K - 1, N)$ ”