

An Introduction to Parallel Programming: Errata

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General

- Kindle edition only. The plural of a C type is printed as the type followed by a space and an “s.” For example, “doubles” is printed as “double s.” (May 21, 2011)
- Kindle edition only. Formatting of displayed code that is not enclosed in box has no indentation. (May 26, 2011)

Chapter 2

- Section 2.3.3, p. 37, next to last sentence in paragraph 3: The number of links in a ring is p and the number of links in a toroidal mesh is $2p$. (Sept 8, 2011)
- Section 2.7.1, p. 69, Figure 2.2.2: It looks like there is an arrow from the oval in the third row labelled `loc_bin_cts[b-1]++` to the oval labelled `bin_counts[b]+=`. This is actually a continuation of the arrow from the oval labelled `loc_bin_cts[b]++` in the second row. (July 5, 2011)

Chapter 3

- Section 3.4.6, p. 110, Table 3.4: column 10 “+6’” should be “2”.
- Section 3.5, p. 117, end of second paragraph: needs a closing period after `MPI_Pack/Unpack`.
- Section 3.6.2, p. 125: Line 3 should be

$$T_{\text{parallel}}(16, 384, 4) = 3.9 \times T_{\text{parallel}}(8192, 4)$$

- Exercise 3.4, p. 140: The possessives in the last line should have apostrophes: “process 0’s output first, then process 1’s ...”

- Exercise 3.11b, p. 142: “`x_is`” (in fixed-width font) should be “ x_i ” (in math font). (July 14, 2011)

Chapter 4

- Kindle edition only. Exercise 4.7: next to last sentence should end with “thread $(q - 1 + t) \bmod t$?” The “ $\bmod t$?” is missing.
- Kindle edition only. Exercise 4.15: the sizes of the matrices should be $k \times (k \cdot 10^6)$, $(k \cdot 10^3) \times (k \cdot 10^3)$, and $(k \cdot 10^6) \times k$.
- Exercise 4.17e, p. 206: “falses sharing” should be “false sharing.” (May 21, 2011)
- Programming Assignment 4.2, p. 206: “it’s area” should be “its area.” (May 21, 2011)

Chapter 5

- Section 5.10, p. 257, Caption for Program 5.6: “multi threaded” should be “multi-threaded”.
- Exercise 5.5, p. 263. The array `a` should be declared as

```
float a[] = {2.0, 2.0, 4.0, 1000.0};
```

- Exercise 5.12, p. 265. The parenthesis before “With `gcc`” should be deleted.
- Programming Assignment 5.4, p. 269: the last line before the bulleted list should be terminated with a colon, not a period.

Chapter 6

- Section 6.1.6, p. 284, fourth line from bottom of page: the comment `/* Can be faster than memset */` should be deleted.
- Section 6.2.1, p. 302, Program 6.4: The argument `city` to the function `Remove_last_city` isn’t needed (and isn’t used in the program).

Source Code

- Chapter 3: Deleted redundant code from `Merge_low` function in `mpi_odd_even.c` (July 26, 2011)

- Chapter 4: Added `pth_mat_vect_rand_split.c` to archive.
- Chapter 4: Modified `pth_mat_vect_rand_split.c` (May 10, 2011)
- Chapter 5: Added `omp_mat_vect_rand_split.c` to archive. (May 26, 2011)
- Chapter 5: Modified documentation for `omp_mat_vect_rand_split.c`. Added `timer.h`. (July 5, 2011)