

Errata for the book “Parameterized Algorithms” by Marek Cygan, Fedor V. Fomin, Łukasz Kowalik, Daniel Lokshtanov, Dániel Marx, Marcin Pilipczuk, Michał Pilipczuk, and Saket Saurabh

We would like to thank the following people for reporting errors and typos in the book: Ignasi Sau, Yoshio Okamoto, Sahand Mozaffari, Sören Henning, Alejandro Cassis, Jasper Slusallek, Nico Gründel.

- p. viii, line -2: “certain problem” should be “certain problems”
- p. 22, line 9 (i.e., line 2 of Reduction VC.3): “If $k < 0$ and G has more than...” should be “If $k < 0$ **or** G has more than...”
- p. 24, line -3: $k'^2 + k'$ should be $k'^2 + 2k'$
- p. 39, statement of Theorem 2.26: the proof shows only the bound of $d! \cdot k^d \cdot d$ on the number of sets
- p. 42, last line of Exercise 2.29: “function d ” should be “function f ”
- p. 76, Bibliographic notes: The discussion on “LP-guided branching” (fourth paragraph) should mention the work of Guillemot (Sylvain Guillemot, *FPT algorithms for path-transversal and cycle-transversal problems*. Discrete Optimization 8(1): 61-71 (2011)) where the first LP-guided branching algorithms were presented.
- p. 84, line 23: the definition $q = k + 1$ is missing here
- p. 84–85: in the literature, the “natural position” of v is often denoted $p(v)$, not $p[v]$ as in our book
- p. 92, line 24: “find a set S ” should be “find a set X ” and “ $G - S$ ” should be “ $G - X$ ”
- p. 96, hint to Exercise 4.5: in the last bullet, some people find it more intuitive to reduce to the problem of finding a matching of maximum weight in a weighted bipartite graph (instead of maximum matching of minimum cost)
- p. 110, line -3: $k/2^i$ should be $\ell/2^i$
- p. 156, formula (7.2): X_i should be X_j under the max operator
- p. 160, line -13: the treewidth of $K_{m,n}$ is $\min\{m, n\}$, not $\min\{m, n\} - 1$
- p. 184, line -13: “by bounded by” should be “be bounded by”
- p. 189, line 21: “A bramble is the” should be “A bramble is a”
- p. 194, line -3: $p < q$ should be $q < p$
- p. 200, line 20: “scope this book” should be “scope of this book”
- p. 256, Theorem 8.11: “in graph G ” should be “in a graph G ”

- p. 256, line -11: $2k - \lambda < 0$ should be $2k - \lambda < k$
- p. 280, problem 8.2: the quantification for v should be $v \in V(G) \setminus B$, not $v \in V(G)$
- p. 426, line -1: “an equivalent instance of C ” should be “an equivalent instance (x'', k'') of C ”
- p. 430, caption of Figure 13.1: “connectes” should be “connects”
- p. 447, item (ii): $1 \leq j \leq i$ should be $1 \leq j \leq n$
- p. 450, line -14: “we many omit” should be “we may omit”
- p. 458, line 4: $e_{i,j}$ should be $w_{e_{i,j}}$ in the definition of the set S
- p. 469, line 5: “the q -SAT is” should be “the q -SAT problem is”
- p. 469, line 21: “infinimum” should be “infimum”
- p. 471, line 13: “providing” should be “provided”
- p. 537, line 11: “be an index” should be “be the index”