

# List of corrections for master thesis

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This is a list of corrections for the master thesis *Constructive algorithms and lower bounds for guillotine cuttable orthogonal bin packing problems*. Insignificant typos and spelling errors are not included.

Notation: p.  $x$ , t.  $y$  means *page  $x$ , line  $y$  from top*. Similarly p.  $x$ , b.  $y$  means *page  $x$ , line  $y$  from bottom*.

- p. 14, b. 9 The word *certain* should be removed as lemma 2.7 applies for *all* maximal cliques.
- p. 27, b. 1 The sentence should be corrected to: ...the recursive cutting *may* result...
- p. 38, first paragraph The paragraph claims that  $M_C$  based measuring is either not exact or contains an NP-hard subproblem. This is not correct. The measuring is indeed exact and polynomial if the complement is a comparability graph. If the graph is *not* a comparability graph, the claim that the measuring is either not exact or contains an NP-hard subproblem is correct.
- p. 39, fig. 3.10 Correct the caption to: ...However, the graphs in 3.10(a) still represents the guillotine packing in 3.10(b)...
- p. 41, fig. 3.11 The symbols  $\alpha_1$  and  $\alpha_2$  are used to represent cut directions in a whole tree instead of just a single path in the tree. This is not directly wrong as  $\alpha$  is just a map from  $\{1, \dots, k\}$  to  $\{1, \dots, d\}$  but the notation is unclear.  $\alpha_i$  should instead be replaced by  $x_i$ .
- p. 47, t. 5  $\mathcal{T} = \{T'\} \cup \mathcal{T} \setminus T'$  should be  $\mathcal{T} = \{T\} \cup \mathcal{T} \setminus T'$ . That is: The new large set  $\mathcal{T}$  of trees is constructed from 1) a new tree  $\{T\}$  with the selected trees  $T'$  as child nodes and 2) the rest of the trees from  $\mathcal{T}$  that was not among the selected ones ( $T'$ ).

- p. 53, t. 6** There are not  $n - 1$  boxes of size  $(n - 1, 1)$  but  $n$  boxes.
- p. 57, t. 2**  $\alpha_l$  should be  $\alpha_1$ .
- p. 71, b. 3** The timeout ratio does *not* increase with both  $|V|$  and  $\frac{\nu_b}{\nu_c}$  for the SC solver. Instead it has a tendency to *decrease* with  $\frac{\nu_b}{\nu_c}$ .
- p. 83, b. 10**  $K_1$  is defined twice.  $K_1 = \{i \in B \mid w_i > W - p\}$  should be corrected to  $K_2 = \{i \in B \mid w_i > W - p\}$ .