

List of corrections for master thesis

Rasmus Resen Amossen

November 14, 2005

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 α_1 and α_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 α is just a map from $\{1, \dots, k\}$ to $\{1, \dots, d\}$ but the notation is unclear. α_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** α_l should be α_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 $K_2 = \{i \in B \mid w_i > W - p\}$.