

## Addenda and Errata

- p. 11 line -7: replace “to just introduce” by “just to introduce.”
- p. 12 lines 12 and 13: replace “Davis–Putnam–Loveland” name by “Davis–Putnam–Logeman–Loveland.” Is abbreviated as DPLL. Make related adjustments throughout book, including in Subject Index.
- p. 16 line 18: delete comma in sentence “called MINSAT, where each matrix ...”
- p. 24 line 17: add comma after  $s_4$ ; thus, the line becomes “For example, for Boolean variables  $s_1, s_2, s_3, s_4$ , we have ...”
- p. 40 line -3 and p. 64 line -5: replace  
“... every row node of  $R$  has exactly one arc outgoing to (resp. incoming from) the nodes of  $C$  and that arc has the label 1.”  
by  
“... every row node of  $R$  has at most one arc outgoing to (resp. incoming from) the nodes of  $C$  and any such arc has the label 1.”
- p. 111 (4.2.20): expand statement by adding the conclusion  $a \ominus d \geq b \ominus c$ . That is,  
$$a \geq b \text{ and } c \geq d \text{ imply } a \oplus c \geq b \oplus d \text{ and } a \ominus d \geq b \ominus c$$
  
Proof of added result:  $(a \ominus d) \oplus c \geq (a \ominus d) \oplus d \geq a \geq b$ , which implies  $a \ominus d \geq b \ominus c$ .
- p. 200 line -5: replace “ $z = 1$  (resp.  $z = -1$ )” by “ $\alpha = 1$  (resp.  $\alpha = -1$ )”
- p. 234 All arcs of the graphs of 6.2.8 labeled 1 must be relabeled as  $\alpha$ .
- p. 234 lines -7 and -3: replace “ $\geq 1$ ” by “ $\alpha$ .”

p. 274 Corollary (7.4.7): Add “not” to the first sentence. That is, replace the sentence

“Let  $A$  be a Boolean closed matrix with  $n_1$  nonzero columns of which  $n_2$  are monotone.”

by

“Let  $A$  be a Boolean closed matrix with  $n_1$  nonzero columns of which  $n_2$  are not monotone.”

p. 295 Step 6: Replace

“For each  $j \in \bar{J}$ , define  $\delta_j = \min\{\beta_i \mid i \text{ such that } \alpha_j^i \neq \alpha_j^{i*}\}$ .”

by

“For each  $j \in \bar{J}$ , define  $\delta_j = \infty$  if there is no index  $i$  such that  $\alpha_j^i \neq \alpha_j^{i*}$ , and define  $\delta_j = \min\{\beta_i \mid i \text{ such that } \alpha_j^i \neq \alpha_j^{i*}\}$  otherwise.”

p. 390 sentence before (12.4.18): Replace “SAT” in sentence by “MIN-SAT.” That is, replace the sentence

“A class  $C$  of matrix/vector pairs  $(A, c)$ , where  $A$  is over  $\mathbb{B}$  and  $c$  is a rational nonnegative vector, is SAT semicentral if the following holds.”

by

“A class  $C$  of matrix/vector pairs  $(A, c)$ , where  $A$  is over  $\mathbb{B}$  and  $c$  is a rational nonnegative vector, is MINSAT semicentral if the following holds.”