Errata For 1st Edition

Chapter 1

• p. 17, second paragraph from the bottom: “As explained in Sect. 1.10” should be “As explained in Definition 1.10”.

Chapter 2

• Sect. 2.3.2: After running Apply one needs to run reduce, i.e., apply the three reduction rules. This was not made clear in the writing of this section.
• p. 50, problem 2.3. With Berkmin it is impossible to reach a conflict with the given set of clauses, so solve this question with the VSIDS strategy. When we say ‘... make a decision that leads to a conflict’ we mean to make decisions that eventually lead to a conflict (i.e., it is possible that a conflict can be reached only after several decisions).
• p. 51, problem 2.6. The task here is of course to formulate the described problem in propositional logic.

Chapter 4

• p. 82, Example 4.1: “because $x_1$ and $x_2$ are in the same class” should be “because $x_1$ and $x_3$ are in the same class”.

Chapter 5

• p. 115, Fig. 5.1: The constraint in the picture ($-x + 2y \geq 0$) does not match the constraint in the example ($-x + 2y \geq 1$). The correct plot is as follows:

![Graph of constraints]

• p. 125, Eq. (5.32) last line should be $K^−$, not $J^−$.

Chapter 6

• p. 159, Eq. (6.46) should be:

$$\langle a \rangle_S < \langle b \rangle_S \iff (a_{l-1} \iff b_{l-1}) \oplus \text{add}(a, \sim b, 1).$$

• p. 159, Eq. (6.49) should read:

$$ls(a[I], b[U], s) \doteq \begin{cases}
ls(a, b, s - 1)_{i-2} : & i \geq 2^s \wedge b_s \\
ls(a, b, s - 1)_{i} : & i \geq 2^s \gamma - b_s \\
0 : & \text{otherwise}
\end{cases}$$

• p. 163, Def. 6.9, second line: “that uses only constants on the right-hand side of binary bitwise operators, . . . ”
• p. 163, Eq. 6.57 (and the sentence before): replace “$-\lceil b \rceil + 1$” by “$-\lceil b \rceil - 1$”
• p. 167, Problem 6.1: replace “$\oplus$” by “$/$”.

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Chapter 7

- p. 175, Example 7.6: “two arrays $a_1$” should say “two arrays $a_1$ and $a_2$”
- p. 177 – 178, redundant closing parentheses in Eq. (7.19) – (7.22).

Chapter 8

- p. 187, Definition 8.6: $L_D$ should be $\mathcal{L}_D$.

Chapter 11

- Fig. 11.2 on page 248: the labeling $dl < 0$ and $dl \geq 0$ coming out of \textsc{Analyze-Conflict} stands for ‘decision level’. On the other hand in Alg. 11.2.2 in the previous page we used ‘backtrack-level’, so the labels should have been $bl < 0$ and $bl \geq 0$.
- Problem 11.2: When we say that the formula is in NNF we mean that negations are pushed all the way into the atoms, e.g., $\neg(x = y)$ should be $(x \neq y)$ and hence the literal is $e(x \neq y)$.

References

- p. 293: ref 130 is missing the publisher (Springer)