| Page | Line | Details |
| :---: | :---: | :---: |
| 2 | 19 | "ヨattends. $\top \sqsubseteq \neg$ Student" should be " $\exists$ teaches $T\rceil \neg$ Student". |
| 20 | 30 | ". . . the extension of Teacher has more elements than strictly required by $\mathcal{A}_{e x} \ldots$. "; should be ". . . the extension of Person has more elements than strictly required by $\mathcal{A}_{e x} \ldots$ |
| 22 | 36 | $\begin{aligned} & \text { "teaches }{ }^{\mathcal{I}^{\prime \prime}}=\text { teaches }^{\mathcal{I}^{\prime \prime}} \cup\{(b, c 6)\} \ldots \text { "; should } \\ & \text { be "attends }{ }^{\mathcal{I}^{\prime \prime}}=\text { attends }^{\mathcal{I}^{\prime \prime}} \cup\{(b, c 6)\} \ldots \end{aligned}$ |
| 23 | 1 | ". . . this important principle is referred to as the open world assumption, and we will come back to it later." However, OWA is not (explicitly) mentioned again. |
| 24 | 17 | "... we say that $A$ is exactly defined in $\mathcal{T} \ldots$. ; should be "... we say that $A$ is defined in $\mathcal{T}$ ...". |
| 25 | 2 | ". . . concept names that are not defined in $\mathcal{T}$ " should be"concept names that are defined in T". |
| 25 | 34 | "replace all occurrence" should be "replace all occurrences". |
| 27 | 23 | "Example 2.13 Consider the ABox $\mathcal{A}=\{A: a\}$ " should be "Example 2.13 Consider the ABox $\mathcal{A}=\left\{a: A_{0}\right\}$ " |


| 33 | 14 | "Similarly, if $C \sqsubseteq \mathcal{T} \perp$, then $C^{\mathcal{I}}=\emptyset$ in every model $\mathcal{I}$ of $\mathcal{T}$, and thus $C$ is not satisfiable w.r.t. $\mathcal{T}$." should be "Conversely, if $C \nsubseteq \mathcal{T} \perp$, then there must be a model $\mathcal{I}$ of $\mathcal{T}$ with $C^{\mathcal{I}} \neq \emptyset$, and thus $C$ is satisfiable w.r.t. $\mathcal{T}$.". |
| :---: | :---: | :---: |
| 51 | 26 | " $d_{1} \in \mathcal{I}_{1}$ is bisimilar to $d_{2} \in \mathcal{I}_{2}$ " should be " $d_{1} \in \Delta^{\mathcal{I}_{1}}$ is bisimilar to $d_{2} \in \Delta^{\mathcal{I}_{2}}$ ". |
| 53 | 22 | " $\exists c .(M \sqcap \exists c . M \sqcap \exists c . F)$ " should be " $M \sqcap \exists c .(M \sqcap \exists c . M \sqcap \exists c . F)$ ". |
| 56 | 6 | "two interpretation" should be "two interpretations". |
| 58 | 5 | " $A \in N_{C}$ " should be " $A \in \mathbf{C}$ ". |
| 60 | 32 | "three equivalence classes $\left[d_{1}\right]_{S}=\left[d_{2}\right]_{S},\left[d_{1}^{\prime}\right]_{S}$, and $\left[d_{2}^{\prime}\right]_{S}$ " should be "three equivalence classes $\left[d_{1}\right]_{S}=\left[d_{1}^{\prime}\right]_{S},\left[d_{2}\right]_{S}$, and $\left[d_{2}^{\prime}\right]_{S}$ ". |
| 63 | 7 | The list of features that characterise a tree should include a third item: "every node in $V$ is reachable from $v_{r}$ " |
| 65 | 32 | $\begin{array}{ll}\text { Replace } & \bigcup_{r \in N_{R}} r^{\mathcal{J}} \\ \text { with } & \bigcup_{r \in \mathbf{R}} r^{\mathcal{J}}\end{array}$ |
| 67 | 35 | " $\left(d_{1}, \mathcal{I}_{1}\right) \sim\left(d_{2}, \mathcal{I}_{2}\right)$ " should be " $\left(\mathcal{I}_{1}, d_{1}\right) \sim\left(\mathcal{I}_{2}, d_{2}\right)$ ". |


| 70 | 18 | "knowledge base $\mathcal{K}=(\mathcal{A}, \mathcal{T})$ " should be "knowledge base $\mathcal{K}=(\mathcal{T}, \mathcal{A})$ ". |
| :---: | :---: | :---: |
| 72 | 5 | Add $\neg$ T $\equiv \perp$ and $\neg \perp \equiv \top$. |
| 72 | last line | " $\{a: C, a: \neg C\} \subseteq \mathcal{A}$ " should be $"\{a: C, a: \neg C\} \subseteq \mathcal{A} \text { or }\{a: \perp\} \subseteq \mathcal{A} " .$ |
| 77 | Fig. 4.4 | Individuals $b$ and $c$ have been transposed in the graphical representation of the ABox. |
| 88 | 2 \& 3 | Two occurrences of "predecessor" should be "ancestor". |
| 92 | 34 | "the $\forall$-rule is now applicable to $x: \forall r^{-} . C$ and $(a, x): r$ " should be "the $\forall$-rule is now applicable to $x: \forall r^{-} . \neg C$ and $(a, x): r^{\prime \prime}$. |
| 94 | last line | After "... indefinitely. ${ }^{8}$ " add the sentence "Note that this example depends on the use of equality blocking, but one can also construct a (more complex) non-termination example for the case of subset blocking.". |
| 95 | 4 | In Figure 4.9, " $\left(a, d_{i}\right): r$ " should be " $\left(a, d_{i}\right): r, d_{i}:$ Т". |
| 95 | 10 | In Figure 4.9, the condition "for some $0 \leq i<j \leq n$ " should be "for some $0 \leq i \neq j \leq n "$. |
| 99 | 15 | "... replacing them with a copies ..." should be "... replacing them with copies ...". |
| 102 | 37-39 | An upper case " $R$ " is used for a role; elsewhere in the book lower case letters are used for roles. |


| 103 | 2 | An upper case " $R$ " is used for a role name; elsewhere in the book lower case letters are used for role names. |
| :---: | :---: | :---: |
| 109 | 16 | "... every primitive definition $A \equiv C \ldots "$ should be "... every primitive definition $A \sqsubseteq C \ldots "$. |
| 110 | 13 | "... Lemma $5.1 \ldots$ ". should be "... Proposition $5.1 \ldots$... |
| 110 | 15-18 | Replace all occurrences of $C$ with $C_{1}$ and all occurrences of $D$ with $C_{2}$. |
| 116 | $3 \& 4$ | "... by replacing each $p_{i}$ with $P_{i}, \sqcap$ with $\wedge$, and $\sqcup$ with $\vee \ldots$. " should be "... by replacing each $p_{i}$ with $P_{i}, \wedge$ with $\sqcap$, and $\vee$ with $\sqcup \ldots$ ". |
| 116 | $5 \& 6$ | "... the length of $C_{G}$ is quadratic in $n, \ldots$ " should be "... the length of $C_{G}$ is quadratic in the length of $\varphi, \ldots$ ". |
| 119 | 10-12 | $C$ should be $D$ and $D$ should be $E$. |
| 121 | 30 \& 32 | " $\left(\neg F_{0} \ldots \neg F_{n-1}\right)$ " should be " $\left(\neg F_{1} \ldots \neg F_{n}\right)$ ". |
| 122 | 11 \& 12 | "... by replacing each $p_{i}$ with $P_{i}, ~ \sqcap$ with $\wedge$, and $\sqcup$ with $\vee \ldots$. . should be "... by replacing each $p_{i}$ with $P_{i}, \wedge$ with $\sqcap$, and $\vee$ with $\sqcup \ldots$.. |
| 124 | 20 | Replace $\sqcap_{C \sqsubseteq D \in \mathcal{T}} C \rightarrow D$ <br> with $\sqcap_{E \subseteq F \in \mathcal{T}} E \rightarrow F .$ |


| 128 | 7 | The GCI $\top \sqsubseteq \sqcup_{t \in T}^{\sqcup} A_{t} \sqcap \sqcap_{t, t^{\prime} \in T, t \neq t^{\prime}} \neg\left(A_{t} \sqcap A_{t^{\prime}}\right)$ <br> should be $\top \sqsubseteq \sqcup_{t \in T}^{\sqcup} A_{t} \sqcap \sqcap_{t, t^{\prime} \in T, t \neq t^{\prime}} \neg\left(A_{t} \sqcap A_{t^{\prime}}\right)$ |
| :---: | :---: | :---: |
| 131 | 4 | " $\exists d_{1}, \ldots, d_{k}$ " should be " $\exists d_{1}, \ldots, d_{k-1}$ ". |
| 131 | 4 | " $r_{i}^{I}$ " should be " $r_{i+1}^{\mathcal{I}}$ ". |
| 133 | 10 | " $f(i, j) \in A_{t}$ " should be " $f(i, j) \in A_{t}^{\mathcal{L}}$ ". |
| 138 | 23 | "exponentially space-bounded alternating Turing machines" should be "polynomially space-bounded alternating Turing machines". |
| 145 | 19 \& 20 | "such that the extension" should be "such that $\Delta^{\mathcal{I}_{1}}=\Delta^{\mathcal{I}_{2}}$ and the extension". |
| 148 | 9 | "rule CR4" should be "rule CR5". |
| 148 | 11 | "rule CR5" should be "rule CR4". |
| 151 | 5 | "linear in the size of $\mathcal{T}_{0}$ " should be "linear in the size of $\mathcal{T}_{0}$ and $C, D$ ". |
| 158 | 24 | "linear in the size of $\mathcal{T}_{0}$ " should be "linear in the size of $\mathcal{T}_{0}$ and $C, D$ ". |
| 160 | 17 \& 18 | "are the empty set and singleton sets" should be "are sets of cardinality at most 2 ". |
| 162 | 7 | " $X_{0}$ " should be " $\left\{X_{0}\right\}$ " and " $\bar{X}_{i}$ " should be " $\left\{\bar{X}_{i}\right\}$ ". |
| 173 | 31 | "ans $(q, \mathcal{T})$ " should be "ans $(q, \mathcal{I})$ ". |


| 176 | 1 | "disjuct" should be "disjunct". |
| :---: | :---: | :---: |
| 176 | 17 | "of an interpretation $\mathcal{I}$ " should be "of a finite interpretation $\mathcal{I}$ ". |
| 176 | 22 | "Let $\mathcal{I}$ be an interpretation" should be "Let $\mathcal{I}$ be a finite interpretation". |
| 176 | 35 | "İ $\notin \varphi\left[d_{1}\right]$ " should be " $\mathcal{I} \notin \varphi\left[d_{2}\right]$ ". |
| 180 | 15 | "R1 if $d \in B^{\mathcal{I}_{i}}, B \sqsubseteq A \in \mathcal{T}$ and $d \notin B^{\mathcal{I}_{i}}$, then add $d$ to $A^{\mathcal{I}_{i+1}}$;" should be "R1 if $d \in B^{\mathcal{I}_{i}}$, $B \sqsubseteq A \in \mathcal{T}$ and $d \notin A^{\mathcal{I}_{i}}$, then add $d$ to $A^{\mathcal{I}_{i+1}} ; "$ |
| 181 | 7 | "consistute" should be "constitute". |
| 181 | 15 | "... any model of $\mathcal{I}_{\mathcal{K}} \ldots$..." should be "... any model of $\mathcal{K}$...". |
| 203 | 14 | The reference to HS12 should be a refence to "Thomas Eiter, Magdalena Ortiz, Mantas Simkus, Trung-Kien Tran, Guohui Xiao: Query Rewriting for Horn-SHIQ Plus Rules. AAAI 2012". |
| 203 | 29 | The reference to DLNS98 should be a refence to "Andrea Schaerf: On the Complexity of the Instance Checking Problem in Concept Languages with Existential Quantification. J. Intell. Inf. Syst. 2(3): 265-278 (1993)". |
| 208 | 8 | The owl: and rdfs: namespace prefixes are used without ever being defined. |

