

Updated on September 29th, 2008.

Corrigenda and addenda for "Applications and Advances of DSMT for Information Fusion, Collected Works, Vol.2" by F. Smarandache and J. Dezert (Editors), American Research Press, 2006.

This file provides typo corrections and additions done on electronic version of the aforementioned book available on the web with respect to its printed version since its publication.

page 39 (at the top): The correct approximate results for $m_{DS}(\cdot)$ are

$$m_{DS}(A) = 0.610 \quad m_{DS}(B) = 0.146 \quad m_{DS}(A \cup B) = 0.244$$

page 40 (section 1.11.1.3., line 3): The last two probability masses of the second source had an incorrect index. The correct input masses are:

$$\begin{aligned} m_1(A) &= 0.6 & m_1(B) &= 0.3 & m_1(A \cup B) &= 0.1 \\ m_2(A) &= 0.2 & m_2(B) &= 0.3 & m_2(A \cup B) &= 0.5 \end{aligned}$$

page 47: The correct derivation of $m_{123}(A \cap B)$ is obtained as follows:

$$\begin{aligned} m_{123}(A \cap B) &= [m_{12}(A)m_3(B) + m_3(A)m_{12}(B)] + [m_3(A)m_{12}(A \cap B) + m_3(B)m_{12}(A \cap B) \\ &\quad + m_3(A \cup B)m_{12}(A \cap B)] \\ &= [0.44 \cdot 0.4 + 0.4 \cdot 0.27] + [0.4 \cdot 0.24 + 0.4 \cdot 0.24 + 0.2 \cdot 0.24] = 0.524 \end{aligned}$$

page 239: The fourth bullet item must be corrected as follows:

- If one supposes the truth is in A , then $D_1 = \{A, A \cap B, A \cap C, A \cap B \cap C\} \equiv \mathcal{P}(A) \cap (D^\ominus \setminus \emptyset)$, i.e. D_1 contains all the parts of A which are included in D^\ominus , except the empty set. D_2 contains all elements which do not contain the letter A , i.e. $D_2 = (\{B, C\}, \cup, \cap) = D^{\{B, C\}} = \{B, C, B \cup C, B \cap C\}$. $D_3 = \{A \cup B, A \cup C, A \cup B \cup C, A \cup (B \cap C)\}$, i.e. In this case, sets whose formulas contain both the letters A and at least a letter from $\{B, C\}$ and are not included in D_1 .

page 240: Right before the section 9.3.1, the following sentence has been added in order to specify clearly that we work with well-defined formulas:

For all forthcoming BCR formulas, we suppose all denominators are non-zero.

page 240 (section 9.3.1): In the definition of k -largest and k -smallest element of D_1 , one should read: "with $X \subset Y$, and $Y \subset W$." instead of "with $X \subset Y$, and $X \subset W$."

pages 247-248: $D_1 \cup D_3$ must be replaced by $D_2 \cup D_3$ under the third summation symbol of BCR17-BCR21 formulas.

page 276: Table 10.4 must be corrected as

QAO_o	L_0	L_1	L_2	L_3	L_4	L_5
L_0	L_0	L_1	L_1	L_2	L_2	L_3
L_1	L_1	L_1	L_2	L_2	L_3	L_3
L_2	L_1	L_2	L_2	L_3	L_3	L_4
L_3	L_2	L_2	L_3	L_3	L_4	L_4
L_4	L_2	L_3	L_3	L_4	L_4	L_5
L_5	L_3	L_3	L_4	L_4	L_5	L_5