



# Correction to: An ontology supported hybrid approach for recommendation in emergency situations

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## Correction to: Annals of Telecommunications.

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1. The correct citations for equations should be the below and not [4], [5], and [6] as well as the formula for eq. 2 should not be duplicated.

Similarity of case  $i$  with the new case ( $S_i$ ) is computed by [1]:

$$S_i = \frac{\sum_{j=1}^m (S_{ji} W_j)}{m} \quad (1)$$

where  $m$  is the number of features considered for calculating similarities and  $W_j$  is the weight factor of feature  $j$ . Two types of data can be found in the case base: numerical data and string data. In numerical data, the similarity between feature  $j$  of case  $i$  and feature  $j$  of a new case (i.e.,  $S_{ji}$ ) is calculated using the following eq. [2]:

$$S_{ji} = \left( 1 - \sqrt{\left( \frac{C_{ji} - n f_j}{\max(C_j) - \min(C_j)} \right)^2} \right) \quad (2)$$

where  $C_{ji}$  is the value of the  $j$ th feature of the  $i$ th case and  $\max(C_j) - \min(C_j)$  is the largest possible value of the  $j$ th feature.

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On the other hand, in textual data, the similarity between feature  $j$  of case  $i$  and feature  $j$  of a new case (i.e.,  $S_{ji}$ ) is calculated using the following eq. [3]:

$$\text{If } C_{ji} = n f_j, \text{ then } S_{ji} = 1; \text{ otherwise, } S_{ji} = 0 \quad (3)$$

- 2 In rule, the correct data should be the below:

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**Rule:1** (?y rdf:type ns:Earthquake), (?y ns:has\_location ?l), (?y ns:has\_magnitude ?m), ge(?m, 3.0), le(?m, 4.0) → (?y ns:needs\_action ns:H\_L-2), (?y ns:needs\_action ns:R\_L-1)

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**Rule:2** (?y rdf:type ns:Earthquake), (?y ns:has\_location ?l), (?y ns:has\_magnitude ?m), ge(?m, 4.0), le(?m, 5.0) → (?y ns:needs\_action ns:H\_L-2), (?y ns:needs\_action ns:R\_L-2)

**Rule:3** (?y rdf:type ns:Earthquake), (?y ns:has\_location ?l), (?y ns:has\_magnitude ?m), ge(?m, 5.0), le(?m, 6.0) → (?y ns:needs\_action ns:H\_L-3), (?y ns:needs\_action ns:R\_L-1)

**Rule:4** (?y rdf:type ns:Earthquake), (?y ns:has\_location ?l), (?y ns:has\_magnitude ?m), ge(?m, 6.0), le(?m, 7.0) → (?y ns:needs\_action ns:H\_L-3), (?y ns:needs\_action ns:R\_L-2)

**Rule:5** (?y rdf:type ns:Earthquake), (?y ns:has\_location ?l), (?y ns:has\_magnitude ?m), ge(?m, 7.0), le(?m, 8.0) → (?y ns:needs\_action ns:H\_L-4), (?y ns:needs\_action ns:R\_L-3)

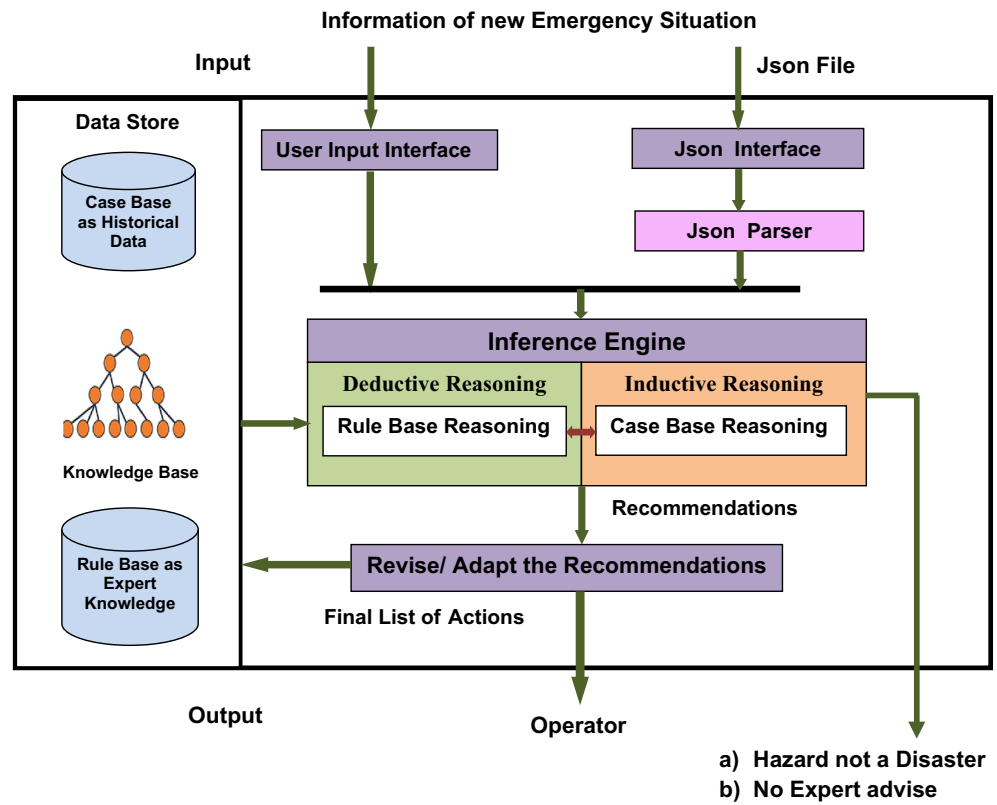
**Rule:6** (?y rdf:type ns:Earthquake), (?y ns:has\_location ?l), (?y ns:has\_magnitude ?m), ge(?m, 8.0), le(?m, 9.0) → (?y ns:needs\_action ns:H\_L-5), (?y ns:needs\_action ns:R\_L-4)

**Rule:7** (?y rdf:type ns:Earthquake), (?y ns:has\_location ?l), (?y ns:has\_magnitude ?m), ge(?m, 9.0), le(?m, 10.0) → (?y ns:needs\_action ns:H\_L-6), (?y ns:needs\_action ns:R\_L-5)

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- 3 Two arrows missing in fig. 1, the correct fig. 1 is shown below:

**Fig. 1** Architecture of Ontology Supported Hybrid Reasoning



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