



## Correction to: Reliable data dissemination for the internet of things using Harris hawks optimization

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### Correction to: Peer-to-Peer Netw. Appl.

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The Publisher would like to correct the introduced formatting errors and presentation of equation 4 and Table 2 in the original publication.

1. Eq. 4 is typeset inappropriately by inserting unnecessary commas and may confuse the reader.
2. In Table 2, some values of the two columns are mistakenly shifted. First, the Parameters with the Experimental setup in the first row of the table must be changed. “Network area size,

Data packet size, Control packet size, Transmission layer protocol, Number of network nodes, Nodes distribution pattern, The initial energy of nodes, and Eelec” should be moved to the left column, as well as their values, move to the bottom right of the table.

The Publisher apologizes for the oversight and for any confusion it may have caused.

The original article has been corrected and the updated equation 4 and Table 2 are presented in this article.

$$\vec{X}(t+1) = \begin{cases} \vec{X}_{rand}(t) - r_1 |\vec{X}_{rand}(t) - 2r_2 \vec{X}(t)|, & q \geq 0.5 \\ (\vec{X}_{prey}(t) - \vec{X}_m(t)) - r_3(LB + r_4(UB-LB)), & q < 0.5, \end{cases} \quad \vec{X}_m(t) = \frac{1}{N} \sum_{i=1}^N \vec{X}_i(t) \quad (4)$$

The online version of the original article can be found at <https://doi.org/10.1007/s12083-020-00933-2>

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**Table 2** The simulation parameters

Parameter	Values
Network area size	100 m × 100 m
Data packet size	20 bytes
Control packet size	2 bytes
Transmission layer protocol	User Datagram Protocol (UDP)
Number of network nodes	100, 200, 300, 400 and 500
Nodes distribution pattern	Random
The initial energy of nodes	0.1 J
$E_{elec}$	50 nJ/bit
$\epsilon_{fs}$	10 pJ/bit/m <sup>2</sup>
$\epsilon_{mp}$	0.0013 pJ/bit/m <sup>4</sup>
$E_{DA}$	nJ/bit/signal
$d_{toBS}$	Between 75 m to 185 m
Number of packets forwarding operator	300
Number of control packets	24
Distance between nodes	Euclidean
The power of sending each node in the cluster radius	10 m
Number of clusters	10 and 20
Number of WNs	30
The initial population of Harris' hawks	20
Number of iterations	100

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