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Author Correction: Artificial neurovascular network (ANVN) to study the accuracy vs. efficiency trade-off in an energy dependent neural network

Bhadra S. Kumar, Nagavarshini Mayakkannan, N. Sowmya Manojna & V. Srinivasa Chakrava

Correction to: *Scientific Reports* <https://doi.org/10.1038/s41598-021-92661-7>, published online 05 July 2021

The original version of this Article contained errors in Equation 37, where n_o was incorrectly given as n .

$$RMSE_{control} = \frac{1}{M} \sum_M \sum_{i=1:n} \frac{(d_i - g_2(h_i^s))^2}{n}$$

now reads:

$$RMSE_{control} = \frac{1}{M} \sum_M \sum_{i=1:n_o} \frac{(d_i - g_2(h_i^s))^2}{n_o}$$

As a result, in the sentence preceding Equation 37,

“Given a test sample size of M data points, the prediction error was calculated in terms of the root mean squared error (RMSE) between the desired output d_i and the predicted output $g(h_i^s)$, $1 < i < n$, where n is the number of neurons in the output layer.”

now reads:

“Given a test sample size of M data points, the prediction error was calculated in terms of the root mean squared error (RMSE) between the desired output d_i and the predicted output $g(h_i^s)$, $1 < i < n_o$, where n_o is the number of neurons in the output layer.”

Furthermore, Equation 40 contained errors

$$RMSE_k = \frac{1}{M} \sum_M \sum_{i=1:I} \frac{(d_i - V_j^k)^2}{I}$$

now reads:

$$RMSE_k = \frac{1}{M} \sum_M \sum_{i=1:n_o} \frac{(d_i - g_2(h_i^s))^2}{n_o}$$

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As a result, in the sentence preceding Equation 40,

“The root mean squared error obtained by shutting off k^{th} neuron ($RMSE_k$) was calculated as below”

now reads:

“The root mean squared error obtained by shutting off k^{th} neuron ($RMSE_k$) was estimated as below by using V_j^k to estimate the new h_i^s (see Eq. 10).”

The original Article has been corrected.



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