

Erratum

Erratum to “Bidirectional Associative Memories: Unsupervised Hebbian Learning to Bidirectional Backpropagation”

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The energy velocity equation (41) in [1] has two missing prime symbols “'” that indicate the derivative of the primed activation function with respect to its argument. The correct equation for the time derivative of the ABAM energy function E should read as follows:

$$\dot{E} = - \sum_{i=1}^n a_i^{x'} (\dot{o}_i^x)^2 - \sum_{j=1}^p a_j^{y'} (\dot{o}_j^y)^2 - \sum_{i=1}^n \sum_{j=1}^p \dot{m}_{ij}^2 \quad (41)$$

$$< 0 \quad (42)$$

REFERENCE

- [1] B. Kosko, “Bidirectional associative memories: unsupervised hebbian learning to bidirectional backpropagation,” *IEEE Trans. Syst., Man, Cybern., Syst.*, vol. 51, no. 1, pp. 103–115, Jan. 2021.

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