Corrigendum: generating functionals for computational intelligence: the fisher in...

A corrigendum on

[Generating functionals for computational intelligence: the Fisher information as an objective function for self-limiting Hebbian learning rules](#)

[by Echeveste, R., and Gros, C. (2014). Front. Robot. AI 1: 1. doi: 10. 3389/frobt. 2014. 00001](#)

In formula (10) of (Echeveste and Gros, 2014) the Fisher information with respect to the synaptic flux was formulated formally as an integral over the postsynaptic activity y, without stating explicitly that the postsynaptic activity $y = y$ (y) is actually a function of the N_w presynaptic activities y = (y 1 , … , y N w) . The correct version of equation (10) is hence

$$F w = \int \left(\sum_{j=1}^{N_w} w_j \frac{\partial}{\partial w_j} \ln \left(p (y (y)) \right) \right)^2 \times p (y) \, d y .$$

The functional dependence of the postsynaptic y on the presynapticywas implicitly used in equation (12) and in the derivation of the synaptic plasticity rules, but otherwise not explicitly stated.

Acknowledgments

Reference

Echeveste, R., and Gros, C. (2014). Generating functionals for computational intelligence: the Fisher information as an objective function for self-limiting Hebbian learning rules. *Front. Robot. AI* 1: 1. doi: 10. 3389/frobt. 2014. 00001

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