



Correction: Adversarial concept drift detection under poisoning attacks for robust data stream mining

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Correction to: Machine Learning

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In the original article, we have referred to Jaworski et al. (2021) as the originators of the idea of using Restricted Boltzmann Machines for drift detection, but we failed to acknowledge earlier work by Jaworski et al. (2017, 2018) that introduced foundations for the general idea of using reconstruction models for concept drift detection, training RBMs over mini-batches and using regression over reconstruction error trends to detect concept drift.

We apologize to the authors for this omission, and acknowledge that their earlier work, together with the cited work, was fundamental for building the robust drift detection algorithm presented in our work.

The online version of the original article can be found at <https://doi.org/10.1007/s10994-022-06177-w>.

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References

- Jaworski M, Duda P, Rutkowski L (2017) On applying the Restricted Boltzmann Machine to active concept drift detection. In: 2017 IEEE Symposium Series on Computational Intelligence, SSCI 2017, Honolulu, HI, USA, November 27 - Dec. 1, 2017, IEEE, pp 1–8.
- Jaworski M, Duda P, Rutkowski L (2018) Concept Drift Detection in Streams of Labelled Data Using the Restricted Boltzmann Machine. In: 2018 International Joint Conference on Neural Networks, IJCNN 2018, Rio de Janeiro, Brazil, July 8–13, 2018, IEEE, pp 1–7.
- Jaworski M, Rutkowski L, Staszewski P, Najgebauer P (2021) Monitoring of Changes in Data Stream Distribution Using Convolutional Restricted Boltzmann Machines. In: Rutkowski L, Scherer R, Korytkowski M, Pedrycz W, Tadeusiewicz R, Zurada JM (eds) Artificial Intelligence and Soft Computing – 20th International Conference, ICAISC 2021, Virtual Event, June 21–23, 2021, Proceedings, Part I, Springer, Lecture Notes in Computer Science, vol 12854, pp 338–346.

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