

**Analysis of the proficiency of fully connected neural networks in the process of classifying digital images. Benchmark of different classification algorithms on high-level image features from convolutional layers**

Jonathan Janke (a), Mauro Castelli (a), Ales Popovic (b,a)

(a) Nova Information Management School (NOVA IMS), Universidade Nova de Lisboa. 1070-312, Lisboa, Portugal

(b) Faculty of Economics, University of Ljubljana. Kardeljeva ploscad 17, 1000 Ljubljana, Slovenia

*This is the accepted author manuscript of the following article published by Elsevier:*

Janke, J., Castelli, M., & Popovič, A. (2019). Analysis of the proficiency of fully connected neural networks in the process of classifying digital images: Benchmark of different classification algorithms on high-level image features from convolutional layers. *Expert Systems with Applications*, 135, 12-38. <https://doi.org/10.1016/j.eswa.2019.05.058>



*This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).*