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- 1) [AL Maas, AY Hannun, AY Ng, Rectifier Nonlinearities Improve Neural Network Acoustic Models.](#)

This Paper compares the performance of Sigmoid Activation function based DL's and Rectified Linear Unit Function based DL's. Highlighting advantages of using ReLU based units in the hidden layers. Then it compares Leaky ReLU based DL's performance with a standard ReLU based DL.

- 2) [Bing Xu, Naiyan Wang, Mu Li, Tianqi Chen, Empirical Evaluation of Rectified Activations in Convolution Network](#)

This paper uses All forms of ReLU based activation functions in a Convolution Network and compares the performance on standard image classification task. The functions compared include ReLU, Leaky ReLU, Parametric ReLU, Random ReLU.

- 3) [The "Softmax" Nonlinearity: Derivation Using Statistical Mechanics and Useful Properties as a Multiterminal Analog Circuit Element](#)

This paper starts by deriving and proving Softmax Function's Non-Linearity. Then it represents it as a reciprocal, passive, incrementally passive, nonlinear, resistive multiterminal element of an analog circuit.