DS-670 Lab 10: Comparison table between your algorithm and your competitor's algorithm

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1. APA-style reference:

F. Lollia, R. Gamberinia, A. Regattierib, E. Balugania, T. Gatosb, S. Guccib. International Journal of Production Economics. Volume 183, Part A, January 2017, Pages 116–128

2. Comparison table:

Competitor	**My algorithm**
In this paper, the authors are using a single hidden layer neural network to compare neural networks and extreme learning machines. Neural networks trained by back-propagation and extreme learning machines are compared with benchmark neural networks, as well as standard forecasting methods for intermittent demand on real-time series, by combining different input patterns and architectures. A statistical analysis is then conducted to validate the best performance through different aggregation levels. Finally, some insights for practitioners are presented to improve the potential of neural networks for implementation in real environments.	My work is comparing regression models (lm) and Neural networks (Neuralnet), pertaining to their utilization in predicting stock market volatility. My algorithm is using two hidden layer, with seven hidden units each. The model proposed by the authors of this paper is using a single hidden layer neural network, which is very simplistic in terms of prediction and forecasting. Compare to my model, I think my model would perform better because I am using a multiple hidden layers in my application of the neural network.
Article results comparison by 10	**different metrics**
The authors are using a single layer. The algorithm converges quickly. However, the results might be less precise.	I am using two hidden layers instead. My algorithm takes more time to run therefore has a longer convergence time. However, the results are more precise because the algorithm has more training repetitions
Convergence time: Fast	Convergence time: Slow
Time it take to run: Short	Time it take to run: Longer
Results precision: Less	Results precision: More
Area of application: Intermittent demand	Area of application: Stock market prediction

Complexity: Simple	Complexity: More complex
Interpretation of results: Easy	Interpretation of results: Fairly complex
Adaptive learning rate: Low	Adaptive learning rate: High
Overfitting: Less prone to	Overfitting: Highly prone to
Performance: Less performant	Performance: Highly performant