

**NEURAL NETWORK ALGORITHMS IN CLASSIFYING  
CONTINUOUS VALUED INPUTS**

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## Summary

The aim of this scientific and research work is to examine the field of Artificial Neural Networks from both the theoretical and practical points of view. A critical analysis covering historical background, theory, algorithms, and applications is presented.

Both the perceptron and multi-layer perceptron based neural net models will be examined. Simulated data in two and three dimensional spaces has been generated to train, and then evaluate single layer, two layer and three layer neural nets.

Finally, the capacity of multi-layer perceptron nets have been applied for classifying data in the fields of medical diagnosis and weather forecasting.

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