Abstract

In Artificial Intelligence classification is a process of identifying classes of a different entities on the basis information provided from the dataset. Extreme Learning Machine (ELM) is one of the efficient classifiers. ELM is formed by interconnected layers. Each layer has many nodes (neurons). The input layer communicates with hidden layer with random weight and produces output layer with the help of activation function (transfer function). Activation functions are non-linear functions and different activation functions may produce different output on same dataset. Not every activation function is suited for every type classification problem. This paper shows the variation of average test accuracy with various activation functions. Along with it also has been shown that how much performance varied due to selection of random bias parameter between input and hidden layer of ELM.

References

1. Guang-Bin Huang, Hongming Zhou, Xiaojian Ding, Rui Zhang, “Extreme Learning


22. Erik Cambria, Guang-Bin Huang, ”Extreme Learning Machines”, IEEE Computer Society, 2013

**Index Terms**

Computer Science | Software Engineering

**Keywords**

Extreme machine learning, feedforward network, neural network, classification