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Authors:

Preksha Pareek

Bhaskar Bissa

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Abstract

Pattern recognition is the science which helps in getting inferences from input data, usage of tools from machine learning and other algorithm designing. Neural networks techniques are popular in the field of pattern recognition. The importance of Neural Network is that it provides very powerful framework for representing mappings from several input variables to output variables. Self Organizing Map(SOM) technique has been applied in this work where implementation of one-D, two-D SOM has been done and modified algorithm of SOM has been proposed. In SOM unsupervised learning is employed where targets are not specified. Implementation of this has been done in C++. As a result of this modified algorithm of SOM

performs better than using architecture of one-D map and two-D map networks for some sets of patterns.

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Index Terms

Computer Science

Pattern Recognition

Keywords

Som unsupervised Learning Machine Learning.