Abstract

In data mining two important tasks involved are classification and clustering. In general, in classification the classifier assigns a class label from a set of predefined classes to a new input object. Whereas, given a set of objects, clustering creates different groups of these objects using some similarity measure. In the context of machine learning, classification is supervised learning and clustering is unsupervised learning. There are different approaches used for classification and clustering. In recent past many fuzzy neural networks have been proposed which can be employed for classification and clustering. Unlike other techniques, the fuzzy neural networks are quickly trainable, suitable for online training, provides soft decision, and capable of constructing nonlinear decision boundaries. All these benefits make them suitable for difficult real world problems involving classification and clustering. This paper provides review on recent fuzzy neural learning algorithms and mainly focusing on pattern/object classification and clustering.


Index Terms

Computer Science Artificial Intelligence

Keywords

Classification; Clustering; Fuzzy Neural Network