Abstract

Data mining is an automated process of excavating useful information that is previously unknown, from huge and enormous volumes of data. This information is used in banking, agriculture, medical diagnosis, telecommunication, intrusion detection, genetic engineering, education, marketing, investments, weather forecasting etc. Classification is one of the most important data mining techniques. Many real world problems are being solved using this approach. Neural networks, as a classification technique has emerged as an important soft computing based approach in data mining. It is being used widely in healthcare for prediction and analysis. But there are some apprehensions regarding privacy of the individuals to whom the data originally belongs. In this paper, a methodology has been developed to resolve the privacy issue by integrating fuzzy logic in the process of NN classification and at the same time the accuracy of the results of the NN classification has been preserved as in the absence of integrated privacy constraints.
19. Abid Sarvar, Vinod Sharma, “Comparative analysis of machine learning techniques in
Fuzzy Framework for Preserving Privacy in Neural Networks Classification


Index Terms

Computer Science

Fuzzy Systems

Keywords

Privacy preserving data mining, Soft Computing, Neural Networks, Fuzzy sets, Fuzzy membership function