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APPLICATION OF NEURAL NETWORKS FOR DATA CLUSTERING

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In this paper, we consider the use of neural networks of various structures to solve the problem of dividing objects according to similar features into an unknown number of classes in advance. Cluster analysis is used to analyze large amounts of data for hidden patterns and to visualize the data structure for greater clarity. The use of artificial neural networks to solve the clustering problem is justified due to their specifics of work. Depending on the type of data belonging to clustering and on the specifics of the task, it is appropriate to use various structures of neural networks.

Keywords: data clustering, neural networks, sigma-pi neural networks, cluster analysis, Kohonen networks, multilayer perceptron, training set.

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