Algorithms for training neural networks in image recognition by a uniform test

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Abstract

The article analyzes the possibility of increasing the training efficiency of a neural network that recognizes digit images. The network is configured so that all training samples are recognized. A uniform criterion of training quality is used. The considered algorithms allow both to speed up the learning process, and to reduce the number of adjustments of the neural network parameters. The last feature is important when parallelizing the learning process in cluster computing systems.

Keywords: neural networks, image recognition, digit image, cluster computing.

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Access full text (in Russian)

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