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USE OF GENETIC ALGORITHM IN DEEP NEURAL NETWORKS CONFIGURATION FOR THE PURPOSES OF COMPUTER ATTACKS CLASSIFICATION

The task of multiclass network classification of computer attacks is given. The applicability of deep neural network technology in problem solving has been considered. Deep neural network architecture was chosen based on the strategy of combining a set of convolution and recurrence LSTM layers. Optimization of neural network parameters based on genetic algorithm is proposed. The presented results of modeling show the possibility of solving the network classification problem in real time.
Keywords: deep neural network, architecture, optimization parameters, convolution layer, recurrence layer, long short-term memory, network classification, computer attack.