ANNOTATION

The thesis project investigated artificial neural networks, their classification, structure. Methods of neural networks training are described. Network attacks, their types, the database of attacks which was used as the basis of the training of the neural network were also considered. The practical part describes DoS attacks, Matlab environment.

The neural network was deployed in the Matlab R2019a environment using the Neural Network Toolbox package, its training to DoS attacks was presented and the results were obtained. A comparative analysis was carried out and a neural network with an optimal number of neurons was selected. The neural network was also tested to detect attacks.