

## ABSTRACT

Topic: Module of classification of objects for systems of sorting of products in supermarkets.

Thesis contains 73 p., 9 tabl., 30 fig., 2 ext., 16 references.

ARTIFICIAL INTELLIGENCE, MACHINE EDUCATION, NEURAL NETWORK, IMAGE CLASSIFICATION, NETWORK NETWORK, TENSORFLOW, TECHNOLOGY, DEVELOPMENT, WEB-APP.

Object of research: Models of classification and analysis of images, their types and standards.

Subject of research: The module for the classification of product images in a supermarket.

The purpose of the work: Architecture development and description of the principles of the module classification of objects for systems of product sorting in supermarkets, practical implementation of the system.

Relevance - Ensuring the accuracy of the classification of images with the minimum necessary usage of resources.

The results of the work are:

- proposed architecture of the module of classification of images;
- selected configuration parameters of the module;
- developed module of classification.

Novelty of work: The analysis of the influence of the architecture of the neural network on its accuracy was made, the accuracy of the classification from the number of training periods was analyzed.