ABSTRACT

Master thesis: 63 p., 5 figures, 22 tables, 2 annexes, 25 sources.

Object of research: algorithms of data compression

The purpose of this work is to develop an intelligent system for improving image compression algorithms. The paper analyzes concepts, approaches and methods of compression of images, reviews of existing works and systems for improving compression algorithms.

Results of work:

– the architecture of the system of intellectual improvement of compression algorithms is proposed;

– a software product (REST web service) is implemented, which serves as an interface for improving the image;

– a startup is implemented - the project of the integration package MS Dynamics CRM and MS Sharepoint, using the developed image enhancement system.

Novelty of work:

– a fundamentally new way of constructing a system for improving image compression is proposed;

– the use of own approaches to the decision of problems of compression of images is substantiated.

The results of this work can be used to build a system for improving the compression of images based on neural networks. Placed as a REST web service system is available for use as part of a more complex online-oriented system.

NEURAL NETWORK, CONVOLUTIONAL NEURAL NETWORK, IMAGE COMPRESSION, COMPUTER VISION, MS DYNAMICS CRM