

ABSTRACT

Topic: Subsystem of emotional recognition using Deep Learning.

Thesis contains 86 p., 8 tabl., 27 fig., 2 ext., 16 references.

MACHINE LEARNING, NEURAL NETWORK, IMAGE CLASSIFICATION, CONVOLUTIONAL NEURAL NETWORK, TECHNOLOGY, DEVELOPMENT, WEB-APP.

Object of research - Methods of recognition of images and emotions.

Subject of research - Subsystem of emotions recognition of a person for its frontal image.

The purpose of the work - the development of architecture and description of the principles of the subsystem of emotion recognition, as well as the practical implementation of the system.

Relevance - the use of the subsystem in human-machine interfaces and robotics; also preservation of human life and health; applications in security systems, marketing.

Results of work:

- proposed architecture of the subsystem of emotional recognition;
- the proposed algorithm is implemented as a web service in the cloud;
- the client for a web service has been developed.