

The thesis: 92 p., 28 p., 6 tabl., 2 appendixes, 31 references.

Object of research is a face classifier by Haar's cascade.

Subject of research is comparison of classifier quality depend on volume of sample.

The main goals are to build a series of faces qualifiers, based on Viola-Jones method with Haar features and comparative analysis of their quality.

Theoretical and methodological basis of study are works of foreign scholars in the field of machine learning.

This work discovers the problems of computer recognition, its relevance, the review of the existing methods of face detection, including selected method of Viola-Jones, the main stages of cascade training states with using the OpenCV library and its utilities. In results, there are range of frontal classifiers, which were compared by their quality in different volume of sample. In addition, comparison of quality of frontal and profile cascade was made using the samples with the same volume and ROC-analysis was made for those classifiers. The boosting was used for boosting the system.

The software is implemented using the programming language Python.

METHOD OF VIOLA-JONES, HAAR'S FEATURES, OPENCV, BOOSTING, CASCADE, CLASSIFIER, ROC-ANALYSIS