# ABSTRACT

82 pages, 2 tables, 36 pictures, 9 applications, 28 sources.

ANALYSIS OF METHODS AND ALGORITHMS OF DETECTING PERSONS, ANALYSIS OF EXISTING ALGORITHMS OF FACE DETECTION, ANALYSIS AND RESEARCH OF VIOLA-JONES ALGORITHM, HAAR FEATURES, INTEGRAL IMAGE, ADABOOST, IMPLEMENTATION OF VIOLA-JONES ALGORITHM, SELECTING RESEARCH TOOLS, TESTING

In this work was made an analysis of existing face detection and recognition algorithms. The Voila-Jones algorithm was selected for the research. The analysis of a package of applied programs for solving technical computing problems "MATLAB" is carried out. Using the selected development tool, the selected detection algorithm was implemented. During testing the algorithm, the values ​​of errors of the first and second kind were obtained. As a result of the work, a modification of the Viola-Jones algorithm was performed by replacing the standard AdaBoost algorithm with the built-in algorithms of the MATLAB package and comparing them.