

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 Viola-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.