

## ABSTRACT

Thesis: 92 p., 8 tabl, 38 fig, 2 app, 15 sources.

FACE RECOGNITION, DETECTION SYSTEM, LOCALIZATION OF IMAGES, IMAGE PROCESSING, CLASSIFIERS.

Object of research: processes of recognition of a person's face in an image (in a video stream).

Subject of research: methods and means of recognizing a person's face in an image (in a video stream).

The purpose of the study: to develop a software product that recognizes the person (s) in the incoming video stream.

Relevance of the research: to date, methods of face recognition are gaining momentum. This technology is used by shoppers to track visitors, security companies to detect thieves, logistics companies to track the driver's face, etc.

Software: Python programming language.

Result: several facial recognition algorithms have been investigated, a software tool for recognizing a person's face in the input video stream has been developed using the Viola-Jones method and local binary templates.

Directions of further research: improvement of the system of recognition of faces of people and their implementation.