

ABSTRACT

Diploma work: 80 p., 7 tabl., 12 fig, 2 appendixes, 9 sources.

The purpose of given paper is to improve algorithms for tracking objects in video streams where fast, sharp movements take place and consequently, a significant distortion of shape and blurring of image from frame to frame is occurring.

In this work, research of the performance criterias of tracking algorithms had been carried out. The analysis of basic mathematical structures, on which objects tracking is based on and of popular concepts for building existing algorithms was completed.

The results of work carried out is a qualitative analysis of the effectiveness of existing implementations tracking algorithms, development of own algorithm modification utilizing color space conversion, blurring of inner area and Hough transform. During work, the programmatic module for launching tracking algorithm implementations was build, in C ++ using OpenCV library.

COMPUTER VISION, IMAGE COMPARIZON ALGORITHMS,
TRACKING, PROGRAM ENGINEERING, OPENCV.