

Thesis: 89 pp., 2 tabl., 10 fig., 2 appendixes, 15 sources

Object of research: segmentation of images.

Subject of research: finding the maximum flow for image segmentation.

The aim of the thesis: analysis and application of maximum flow algorithms for image segmentation.

Theoretical and methodological basis of the research work is in the field of computer vision.

Results: the meaning of computer vision and image segmentation were revealed, the optimization approach to computer vision was considered, maximum flow algorithms were analyzed and the mathematical model of segmentation was built.

Contribution: theoretical analysis of the maximum flow algorithms, segmentation algorithm implementation.

IMAGE SEGMENTATION, COMPUTER VISION, GRAPH THEORY,
MAXIMAL FLOW FINDING, MINIMAL CUT