ABSTRACT

Thesis: 118 p., 9 tables, 32 fig., 2 append., 35 sources.

LOCAL FEATURE EXTRACTION, IMAGE KEYPOINTS, EDGE DETECTION, FEATURE DESCRIPTORS, CONVOLUTIONAL NEURAL NETWORKS, LARGE-SCALE IMAGE CLASSIFICATION.

The theme of this work is local feature extraction and description for landmark recognition on images.

The object of study – local feature extraction algorithms for object recognition on images.

The subject of study – an application of local feature extraction methods on landmark image classification problem.

The purpose of this work is to investigate theoretical and practical aspects of the famous local feture extractors, conduct exploratory data analysis and preprocess input data, study and compare local feature extraction algorithms in conjunction with classification method, construct the model for landmark image classification.