

The research object of this diploma thesis is hand recognition problematics. The first part of this work is dedicated to palm photograph processing and extraction of characteristic features. Extracted features are used as inputs of investigated classification methods. The second part of this work provides detailed description of explored methods and their modifications, which are the research objects. Diploma thesis includes description and experimental results of minimum distance classifier, Bayes naive classifier and method based on neural networks. The aim of this work is the comparison of the particular methods with respect to classification success and time needed for classifier construction and classification of all available patterns. The main approach is to choose the best method, which solves the problem of hand recognition according to our experimental results.