

ABSTRACT

For the bachelors work of Denys Serhiyovych Pylypenko

«Speech emotion recognition and classification»

Diploma work: 77 p., 6 tabl., 16 fig., 2 appendixes, 22 sources.

SPEECH, RECOGNITION, CLASSIFICATION METHODS, PYTHON, NEURAL NETWORKS, EMOTIONS, FEATURES.

The purpose of writing this work is to analyze and improve the algorithms and methods human speech emotion recognition and classification.

In this work, the method of processing digital signals had been carried out, the possible characteristics of the speech signal had been investigated. The analysis of basic mathematical structures underlying speech recognition and popular modern methods of classification was completed.

The results of work carried out is an analysis the effectiveness of current approaches to solving the problem of speech emotion recognition, development of own modified algorithm with increasing number of feature and additional speaker gender recognition. During the work, implementation of the proposed algorithm in the programming language Python using various libraries for data analysis.