ABSTRACT

Topic: Speaker identification by voice

Thesis: 119 p. 21 Fig. 2 tables, 9 applications, 21 sources.

Object of research – voice recogniotion methods, Data Mining methods.

Purpose of the study – speaker recognition methods.

Purpose - to examine the subject of a study to explore the main methods to solve this problem.

Research methods - review and analysis of speaker identification methods: discrete Fourier transform, decision tree and multilayer perceptron.

Urgency – ensuring high quality of the security systems.

The results - the analysis of the main methods of identification of the speaker's voice, investigated a modification in which the classifier is used as a random forest with multilayer perceptron.

The novelty of the work: developed a method of speaker identification, which uses a boost between classification of random forest and multilayer perceptron;

Through further development of the subject of study - an analysis of other methods of identification of the speaker based on hidden Markov chains.

SPEAKER IDENTIFICATION, DECISION TREE, MACHINE LEARNING, AUDIO PROCESSING, DISCRETE FOURIER TRANSFORMATIO