

ABSTRACT

Subject of final qualification work: modeling of intellectual system of a clustering of texts (on the example of determination of tonality of responses on the Internet)

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Relevance of a subject of a research: The most part of information which is contained in network is presented in text form in a natural language. It complicates its processing and demands attraction of methods of computational linguistics. Therefore now the relevance of linguistic researches, developments of new effective program systems of extraction of the facts from the unstructured arrays of text information and classification and a clustering of information aimed as at the analysis of messages in network, and on identification of sources of the distributed information increases.

The purpose of work consists in creation of the neural network classifying text information on certain parameters and assessment of quality of work of the created neural network.

Tasks:

1. To study scientific literature about an automatic clustering of the text, to find information about development of this direction;
2. Based on the studied theoretical materials to define characteristics and a way of construction intellectual information the system of a clustering of the text;
3. To study methods of a clustering of texts on tonality in a natural language, in particular, application of neural network in problems of a clustering;

4. To combine the gained knowledge for creation and use of the trained intellectual system classifying text information on an emotional color;
5. To make experiments on training of system and to define efficiency of her work.

The theoretical and practical importance of a research consists in approbation of the offered model of neural network within final qualification work and its application in problems of a clustering of the text.

During work the program of the analysis of tonality of texts on the basis of methods of machine learning has been realized. The following tasks have been solved:

1. The problem of the analysis of tonality is studied, approaches of her decision are analysed.
2. It is realized an algorithm of classification of texts on tonality.
3. The neural network for a clustering of text messages is developed and designed.
4. Testing of efficiency of algorithms is held by method of cross check.

Results of a research: The intellectual system can successfully be applied in problems of a clustering of texts. Results of work can be used as introduction to a theoretical course of bases of the theory of a clustering. Besides, the developed intellectual system can become the module of the software of information resources of the Internet, which will allow to define tonality of responses.

Recommendations: use of intellectual systems in problems of a clustering of texts still is insufficiently studied area of a research which demands more practical realization and experiments for definition of optimum indicators of the developed models.

