ABSTRACT

The thesis is presented in 51 sheets. It contains 3 appendixes and bibliography of 15 references. Twenty two figures and 14 table are given in the thesis.

The goal of the thesis is to develop an expert system for disease diagnosing by its symptoms.

Existing systems of disease diagnosing and existing solutions were viewed, their advantages and disadvantages were analyzed. For the developed system fuzzy logic with using of genetic algorithm for learning parameters of the system was selected.

As a result, system was developed in Matlab environment. The developed system was tested on test examples.

Keywords: bayesian network, fuzzy logic, Mamdani model, Sugeno model, neural networks, genetic algorithm.