

## ABSTRACT

Bachelor's thesis: 126 p., 27 fig., 15 tab., 4 annexes, 18 sources.

This work is devoted to the problem of recognizing situations under conditions of incomplete and fuzzy information. The role of quality indicators awareness in decision-making were considered. The models and methods for situations recognizing were considered. A techniques for unique situations classification by the system of partial awareness indicators were proposed.

Object is a complex systems, that operating under conditions of incomplete and fuzzy information.

Purpose of research is the methods of solving problems recognizing situations under conditions of incomplete and fuzzy information, a software module for decision-making support.

Methods - determining fuzzy relation and their composition. Methods based on distance or similarity between fuzzy situations by the system of awareness indicators.

The results: new methods for situations classification were proposed a software module designed to support decision-making that recognizes and classifies the current situation by the system of awareness indicators.

SYSTEM ANALYSIS, CLASSIFICATION, RECOGNITION OF SITUATIONS, INFORMATION ANALYSIS, QUALITATIVE CHARACTERISTICS, FUZZY INFORMATION, DECISION MAKING.