## ABSTRACT

Master's thesis: 129 p., 27 fig., 39 tabl., 3 appendixes, 27 sources.

The object of study – borrower's credit history, presented statistical data and expert estimates.

Subject of research – mathematical methods and data mining models (logistic regression, Bayesian networks and decision trees) to describe the characteristics of borrowers of loans in financial institutions.

Purpose - improving quality models for evaluating the creditworthiness of the system by improving the methodology for constructing models and integrated use of several methods of data mining.

The method of research - logistic regression, Bayesian networks and decision trees.

Actuality - building models to help clients in evaluating the performance of financial institutions and improve the quality and accuracy of the forecast repayment.

The analysis of the results, of the obtained forecasting model was performed. Based Master study published two scientific papers: 1 article in the student paper collection IASA "System sciences and cybernetics"; 1 article in the form of abstracts in conference SAIT in 2017.

The further development of the research subject - predictive modeling techniques with neural networks.

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