

## ABSTRACT

Thesis: 89 p., 11 table, 19 pic., 2 adds.

AUTOREGRESSION, EXPONENTIAL SMOOTHING, REGRESSIVE MODELING, FORECASTING.

The topic: Tools for safety monitoring of computer systems based on neural networks.

Explanatory note to the diploma project: 81 p., 19 fig. ,11 tabl., 2 appendices.

Object of research – methods for statistic analyzing and identifying suspicions.

The aim – to create decision-making tool for safety monitoring based on neural network. Creating a software product to automate detection of dangers.

The review of some known methods of security monitoring and anomaly detection in computer systems..

Conducted a review of some known methods of time series prediction.

Created informational analytical system for monitoring and dangers detection based on neural network.

The system is implemented on using the programming language Java, are examples of programs for detecting dangers on real datasets. Considered ways of possible further improvement of the system.