

## ABSTRACT

This thesis is presented in 58 pages, it contains 2 applications and bibliography of 30 references. There are 4 images and 2 tables in the thesis.

The work is devoted to the development of mathematical and software for forecasting profits for a football match on total event «total more than 2.5».

In the work the analysis of existing mathematical methods and forecasting models is carried out, an overview of modern methods for forecasting the results of events in a football match is made.

The gradient methods, namely, gradient boosting, were chosen to solve the problem.

An automated system implementing the chosen method is developed. This software provides additional features: save the file with the result of the prediction on the computer. The testing of the developed system is carried out.

Keywords: forecasting, total over 2.5, soccer match, gradient boosting, Poisson distribution.