

I. IDENTIFICATION DATA

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| Thesis name: | Stroke Mortality Prediction |
| Author's name: | Regina Mavrina |
| Type of thesis: | master |
| Faculty/Institute: | Faculty of Electrical Engineering (FEE) |
| Department: | Department of Computer Science |
| Thesis reviewer: | Saitov Rustem Marsovich |
| Reviewer's department: | GKU GSHU «The Main State Agricultural Management of Breeding in Livestock Production of the Ministry of Agriculture and Agriculture of the Republic of Tatarstan» |

II. EVALUATION OF INDIVIDUAL CRITERIA

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| Assignment <i>Evaluation of thesis difficulty of assignment.</i> | extraordinarily challenging |
| In the master's thesis of Mavrina R.Yu., considers the problem of mortality from stroke. As the main idea was to find the best mathematical methods for predicting stroke. The diploma thesis main goal was to develop and find a way to prevent strokes. | |
| Satisfaction of assignment <i>Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.</i> | fulfilled with minor objections |
| In the introduction the author defines the object of research, substantiates the relevance of his thesis. The first chapter visually shows some variables included in the data set, on which the mathematical methods will be applied. The necessary information is given on medical data and processes visualized in the work. The relationship between coronavirus and stroke is also discussed. In chapters two and three, an in-depth analysis of the challenges and issues involved in predicting stroke was covered. All mathematical methods and their algorithms were also described. The work was performed at a high level, but questions were raised while reading it. Why was the R programming language used, and exactly these mathematical methods? | |
| Method of conception <i>Assess that student has chosen correct approach or solution methods.</i> | correct |
| Many mathematical methods and their solution have been analyzed. It has been shown why these methods are suitable or not for predicting stroke. | |
| Technical level <i>Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.</i> | A - excellent. |
| The task is very hard and requires a lot of knowledges from medicine, computer graphics and statistics. | |
| Formal and language level, scope of thesis <i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i> | B - very good. |
| The text of the diploma thesis is well written, but there are times when there are complex sentences that complicate the perception of the information given. | |

Selection of sources, citation correctness**B - very good.**

Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.

I consider selection of 18 sources as adequate for diploma thesis. Student cites relevant sources. During reading of the text, I have not found any violation of citation ethics.

Additional commentary and evaluation

Present your opinion to achieved primary goals of thesis, e. g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.

A very difficult task was set. As a result, it was completely solved. The value of this work is somewhere between excellent and very good.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

1. *The work does not reveal the question of choosing the programming language R. Why these very mathematical methods were chosen.*

I evaluate handed thesis with classification grade **B - very good**.

Date:

Signature:

