

I. IDENTIFICATION DATA

Thesis title:	The Mathematical Model of the Functioning of the Thyroid Gland
Author's name:	Ekaterina Fadeeva
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Computer Science
Thesis reviewer:	Ing. Karel Frajták, PhD.
Reviewer's department:	Department of Computer Science

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
Mathematical modelling is a challenging task, even more in conjunction with medicine.	

Fulfilment of assignment	fulfilled
The author fulfilled the assignment. The goals of thesis were achieved.	

Technical level	B - very good.
From the technical perspective the thesis is of a high quality. The initial chapter on the thyroid gland and its function is well written and introduces the reader into the problem. The same can be said about CUDA technology. But it is not clearly explained why the author have chosen this topic and what the outcome should be.	

Formal level and language level, scope of thesis	D - satisfactory.
Formal level of the thesis is adequate. Given the author is not a native English speaker the language level of the thesis is okay. In the future a language review is recommended. There is number of places where the word-by-word translation from Russian to English obscures the readability to the point of reduced understanding – “as a single whole” (page 16), “Thus, this paper presents a model in which the iodine metabolism rate is put in dependence on the concentration of substances in colloid” (p. 17), “giving up” (p. 18), “the hormones will not be able to produce enough.” (p. 19), “stored in light” (p. 20), “The computing processor is controlled by the host -functions for data exchange are called and tasks are launched on device from the host ... host calls functions for data exchange and launch tasks on device.” (p. 24), “usungto” (p. 25), “withdrawal” (p. 45). Since the author is working on a model of thyroid gland (i.e. medical area) usage of medical terms is advisable (p. 16 – deficiency instead of lack in “persistent lack of thyroid hormones”).	

Selection of sources, citation correctness	C - good.
Citations meet the standards. Selection of sources is adequate. Number of citations is quite small. Cited works are not very recent.	

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

My comments were mentioned above.

Question – Do you think your work will be used any further?

The grade that I award for the thesis is **C - good**.

Date: **17.6.2020**

Signature: