I. IDENTIFICATION DATA

Thesis name:	**Random number generator based on multiplicative convolution transform**
Author's name:	**Nikolai Antonov**
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Computer Science
Thesis supervisor:	doc. RNDr. Daniel Průša, Ph.D.
Supervisor's department:	Department of Cybernetics, FEE

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	**ordinarily challenging**

Evaluation of thesis difficulty of assignment.

I consider the assignment to be "ordinarily challenging" or maybe even "challenging" as it required to gain a good knowledge of various statistical tests and also some skills in the number theory.

Satisfaction of assignment	**fulfilled**

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.

All the assignment points were fulfilled.

Activity and independence when creating final thesis	**A - excellent.**

Assess that student had positive approach, time limits were met, conception was regularly consulted and was well prepared for consultations. Assess student's ability to work independently.

The student had a very positive approach and was truly interested in the topic. He even presented his results at student conferences. He was able to work independently, correctly responded to all my comments and regularly communicated via e-mails after he moved to Kazan. All the time limits were met.

Technical level	**A - excellent.**

Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.

The thesis has a high technical level. It presents interesting experimental as well as theoretical results. The student was able to work with expert literature. He demonstrated convincingly his analytical, mathematical and programming skills.

Formal and language level, scope of thesis	**A - excellent.**

Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.

The thesis is written in a very good English. All ideas are clearly expressed. The text is well organized and structured, mathematical notations are correct, many useful illustrations are provided. The only thing I would criticize is the not so good quality of a few included raster images (especially the image in Fig. 19).

Selection of sources, citation correctness	**A - excellent.**

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.

The student was active in obtaining materials. He selected relevant sources. All the elements from literature were correctly cited and properly distinguished from his own results.

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.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation.

The student demonstrated his ability to work independently. He also demonstrated excellent mathematical and programming skills. The thesis is of high quality and is very well written. It meets all the requirements of the assignment. The proposed random generator shows excellent properties and its implementation is well optimized, hence it has the potential for practical use.

I evaluate handed thesis with classification grade **A - excellent.**

Date: **12.6.2020**   Signature: