THESIS REVIEWER'S REPORT



I. IDENTIFICATION DATA

Thesis title: Novel Geometric-Programming Formulations in Computer-Aided Design of

Integrated Circuits

Author's name:

Adam Bosak

Type of thesis:

bachelor

Faculty/Institute:

Faculty of Electrical Engineering (FEE)

Department:

Cybernetics

Thesis reviewer:

Vyacheslav Kungurtsev

Reviewer's department:

Computer Science

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment

challenging

How demanding was the assigned project?

The topic involves a fair amount of domain knowledge, mathematical maturity in understanding geometric programming, and coding

Fulfilment of assignment

fulfilled

How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.

The student presented a comprehensive overview of geometric programming and its nuances, as well as indicated a solid ability to use popular MATLAB optimization packages

Methodology

correct

Comment on the correctness of the approach and/or the solution methods.

The use of geometric programming is apt, as its structure permits for fast solutions and thus it is a favorable choice. The decisions regarding the particular tools, algorithms and techniques were well justified.

Technical level

A - excellent.

Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?

The student presents a comprehensive understanding of geometric programming and well motivated choices in solution methods

Formal and language level, scope of thesis

B - very good.

Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?

Overall the optimization terminology was clearly defined. A chapter at the beginning on the background of circuit design and delay models would be useful for someone not familiar with the domain.

Selection of sources, citation correctness

A - excellent.

Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?

The thesis clearly delineated the particular contributions of the literature relative to the work in the thesis and the student's own insights



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Additional commentary and evaluation (optional)

Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.

Please insert your comments here.

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

Summarize your opinion on the thesis and explain your final grading. Pose questions that should be answered during the presentation and defense of the student's work.

The grade that I award for the thesis is \boldsymbol{A} - excellent.

Date: 05/06/2022

Signature: