

I. IDENTIFICATION DATA

Thesis title:	Impulse Events Detection and Classification Software
Author's name:	Oluwaseun Olasoji
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Measurement
Thesis reviewer:	Ing. Ondřej Hanuš, Ph.D.
Reviewer's department:	K 13116 FEE CTU in Prague

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>How demanding was the assigned project?</i>	
I rate the project assignment as challenging.	

Fulfilment of assignment	fulfilled
<i>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.</i>	
The student fulfilled all the tasks specified in the assignment.	

Methodology	outstanding
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
The student proceeded correctly and used all means to fulfil the required goals.	

Technical level	A - excellent.
<i>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?</i>	
The technical level of the work is high. The student demonstrated the ability to apply the knowledge acquired during the study in solving a real issue.	

Formal and language level, scope of thesis	B - very good.
<i>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?</i>	
The work is written in English, its content is well-organized and the text is understandable. The minor drawback is the quality of some pictures. Lossless or vector formats would be more suitable for graphs. This small detail slightly spoils the impression of an otherwise well-presented work.	

Selection of sources, citation correctness	A - excellent.
<i>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?</i>	
The student cited all sources correctly in the work.	

Additional commentary and evaluation (optional)
<i>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.</i>



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 student demonstrated the ability to solve a given problem using available sources. All tasks from the assignment were correctly completed. The thesis is well-written and presented. I particularly appreciate the illustrative evaluation of the achieved results with clarifying comments.

The grade that I award for the thesis is **A - excellent**.

Questions:

What is the computational complexity of the presented solution? Is any method of feature extraction or classification significantly faster than others? Could it be used in real-time applications?

What type of NN has been used and why? Are there any other methods of classification suitable for acoustic impulse signals?

Date: **8.6.2023**

Signature: