

I. IDENTIFICATION DATA

Thesis title:	Advanced Sentiment Analysis
Author's name:	Lamoš Stanislav
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Cybernetics
Thesis reviewer:	Ing. Stanislav Kuznetsov
Reviewer's department:	Department of Applied Mathematics / Faculty of Information Technology / CTU

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	ordinarily challenging
<i>How demanding was the assigned project?</i>	
I consider the assignment to be of average difficulty.	

Fulfilment of assignment	fulfilled with minor objections
<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>	
<p>The title of the work is "Advanced Sentiment Analysis," implying the goal of either proposing a custom model or enhancing the state-of-the-art (SOTA) model to achieve better performance in addressing a specific problem. However, based on the results, neither of the custom models attains the performance level of the SOTA model. For instance, in Document-level sentiment analysis, the difference between the best custom algorithm and the SOTA is 0.89 vs 0.96, in Sentence-level sentiment analysis it is 0.81 vs 0.88, and in Aspect category sentiment analysis it is 0.59 vs 0.77. I do not agree with the author's assertion "Therefore, our proposed methods and their results are comparable to SOTA models". Generally, surpassing SOTA models in this context is a challenging task, which the author was unable to accomplish. Consequently, the author introduced a metric based on computational speed, which, in my opinion, is irrelevant during the learning phase and is not the primary objective of the paper. Hence, I consider that the objective of the work is partially achieved with some reservations.</p>	

Methodology	correct
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
The methodology of the work is appropriately chosen, and the motives behind the research are well-described.	

Technical level	C - good.
<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 work is technically standard, but it lacks detailed comments and a notebook with descriptions and comments that would allow for easy testing. Additionally, there is a lack of documentation accompanying the work.	

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 formal language and scope of the work are appropriate for a bachelor's thesis, and it is evident that the work has been thoroughly reviewed. However, there are indications that the writing may not be that of a native speaker.	

Selection of sources, citation correctness	C - good.
<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>	

Some of the citations in the work lack a DOI or link reference, but overall they appear to be well-written and appropriate.

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.

Overall, I would characterize the work as an "Introduction to Sentiment Analysis" where the student has gained familiarity with the problem, developed their own models, and created an experimental environment. However, at this point, I do not see any significant contributions in the work that would be suitable for publication.

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 **C - good**.

The work is certainly interesting as it addresses a relevant topic, and I hope that the student continues to explore this area and presents significant improvements to SOTA models in the future. Overall, I would rate the work as a C.

Q1: Why is low time and memory consumption important to you?

Q2: Do you see any real-world applications where you could utilize your models?

Date: **12.6.2023**

Signature: