

I. IDENTIFICATION DATA

Thesis title:	Emotion Detection from Speech and Written Text
Author's name:	Petr Stadník
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Of Cybernetics
Daniel Novák	Daniel Novák
Reviewer's department:	Of Cybernetics

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>How demanding was the assigned project?</i>	
The assigned project was highly demanding, involving the integration of advanced machine learning techniques for emotion detection from both speech and text. This required in-depth knowledge of natural language processing (NLP), speech processing, and the implementation of state-of-the-art models such as emotion2vec and HuBERT. Additionally, the project involved working with extensive datasets in multiple languages, adding to its complexity.	

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 thesis successfully fulfills the assigned task. The primary goals, including the overview of emotion recognition methods, analysis of relevant datasets, and implementation of a process chain for emotion detection, have been achieved. The thesis comprehensively covers all required aspects, such as evaluating various models and datasets.	

Activity and independence when creating final thesis	A - excellent.
<i>Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.</i>	
The student demonstrated a positive approach, regularly consulting with the supervisor and adhering to agreed-upon deadlines. The preparation for consultations was evident in the detailed and well-organized progress reported in the thesis. The student showed strong independent working capabilities, effectively solving problems and making significant progress on the project.	

Technical level	A - excellent.
<i>Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?</i>	
The thesis is technically sound. The student employed expertise in the fields of NLP and machine learning, effectively using advanced models and techniques. The methodologies and results are clearly explained, with detailed descriptions of the models used, data processing steps, and fine-tuning procedures. The inclusion of comprehensive diagrams and tables further enhances the clarity and technical robustness of the work.	

Formal level and language level, scope of thesis	A - excellent.
<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>	
Formalisms and notations are used properly throughout the thesis. The organization is logical, with a clear progression from introduction to methodology, results, and conclusions. The thesis is sufficiently extensive, covering all necessary aspects in detail. Presentation is professional, and the language used is clear, understandable, and satisfactory in terms of English proficiency.	

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 makes adequate reference to earlier work, drawing from a range of reputable sources in speech and text emotion recognition. The selection of sources is adequate and relevant to the topic. The student's original work is clearly distinguished from existing research, particularly in the implementation and testing of specific models. Bibliographic citations meet academic standards, providing clear references to all consulted works.

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.

Strengths include the thorough methodological approach, integration of state-of-the-art models, and practical utility of the developed system. The theoretical level is reasonable, and the student exhibits a high degree of skillfulness in both technical implementation and theoretical understanding.

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.

In summary, Petr Stádník's thesis is a commendable piece of work that successfully addresses a complex and relevant problem in emotion recognition from speech and text. The project is well-executed, demonstrating significant technical expertise and originality. My final grading is excellent, reflecting the high quality and impact of the work presented.

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

Date: **11.6.2024**

Signature: