

I. IDENTIFICATION DATA

Thesis title:	Action Recognition System
Author's name:	Ostapenko Anastasia
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Cybernetics
Thesis reviewer:	Michal Vavrečka
Reviewer's department:	CIIRC CTU

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>How demanding was the assigned project?</i>	
The project was challenging as it requires to create and annotate the action dataset and train three neural modules to successfully create action recognition system. The neural network training is time consuming and requires fine tuning of hyperparameters	

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>	
Anastasia followed the goals stated in the thesis description. She successfully adopted the neural networks for motion and object detection. She designed and developed the third neural module and the method of the analysis on her own.	

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>	
I appreciate that Anastasia was able to deeply understand task. She did a lot of training and finetuning that increase the quality of the final system	

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 implementation of the system is valid. There is custom repository with the code available. The results confirms the advantage of system compared to baseline. The method of analysis based on precision and recall is questionable, but we consulted its adoption with the expert and it was approved.	

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>	
The thesis is well written and its structure is correct. The English level is good and it is easy to read the thesis. The number of pages is sufficient.	

Selection of sources, citation correctness	Choose an item.
<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 bibliography is large and the quotation are in the correct format.	

**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.

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

I highly appreciate Anastasia's work. She put a lot of effort into the thesis and she proved that the idea behind the work is correct. We send a short version of results as a conference paper to the Neurips conference.

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

Date: **31.5.2022**

Signature: