

I. IDENTIFICATION DATA

Thesis title:	Human-robot collaboration for playing checkers
Author's name:	Elizaveta Isianova
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Control Engineering
Thesis reviewer:	Ing. Štěpán Pšenička
Reviewer's department:	Kuka

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>How demanding was the assigned project?</i>	
In the perspective of complexity of industry projects reflects the assignment the typical task for handling application with robots. Challenging was coverage of several technical areas by one student and the development of heuristic algorithm of the game.	

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>	
All the goals of the thesis were achieved. The student could be more specific about the settings of safety parameters of robot for HRC (Which safety parameters, zones, limits and why). Other tasks were fulfilled completely.	

Methodology	outstanding
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
The methods used are selected thoughtfully and correctly. The student has, in addition, tested several approaches to vision techniques. The student has tested openCV basic vision techniques and industry Keyence vision system to achieve the best performance. The heuristic algorithm was developed correctly and was tested with great results.	

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 thesis is excellent. The thesis is understandable.	

Formal 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>	
English of the thesis is understandable and I have not found any mistakes. Formally the thesis seems to be ok.	

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 selection of sources was adequate.	

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>
Please insert your comments here.



THESIS REVIEWER'S REPORT

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 thesis is written correctly, goals of the thesis are achieved and the application functions as it should. We have tested the device and have not found any problems with functionality, safety, neither intelligibility of control.

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

Date: **26.5.2022**

Signature: