

## I. IDENTIFICATION DATA

<b>Thesis name:</b>	<b>Design of an Electromagnetic Gripper for Unmanned Aerial Vehicles</b>
<b>Author's name:</b>	<b>Ashwin Suresh Nedungadi</b>
<b>Type of thesis :</b>	bachelor
<b>Faculty/Institute:</b>	Faculty of Electrical Engineering (FEE)
<b>Department:</b>	Department of Electroenergetics
<b>Thesis supervisor:</b>	Martin Saska
<b>Supervisor's department:</b>	Department of Cybernetics

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b>	<b>challenging</b>
<i>Evaluation of thesis difficulty of assignment.</i>	
The assignment was challenging as it requires to combine HW and SW design and also implementation works in ROS and Gazebo to enable real world experiments.	

<b>Satisfaction of assignment</b>	<b>fulfilled</b>
<i>Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.</i>	
All points of the assignment were fulfilled as was planned.	

<b>Activity and independence when creating final thesis</b>	<b>C - good.</b>
<i>Assess that student had positive approach, time limits were met, conception was regularly consulted and was well prepared for consultations. Assess student's ability to work independently.</i>	
Student's independence is the weakest point of my evaluation. He required much more advising and helping from group members than other students. For me it is event difficult to judge which parts of the thesis include his ideas and which describe work of our senior researchers and engineers. On the other hand, his activity was huge and again much more than other students. He proposed publishing of his results even before accomplishing the text of the thesis and he contributed into the video report of the MBZIRC 2020 competition, which qualified us to the finals of this challenge.	

<b>Technical level</b>	<b>B - very good.</b>
<i>Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.</i>	
At the end, the technical level is good in my opinion and the provided solution is fully working as was verified by experiments in real-world conditions.	

<b>Formal and language level, scope of thesis</b>	<b>B - very good.</b>
<i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i>	
The quality of the content is very well readable and it contains a minor number of typos and grammar errors. The results are well presented. The quality of the text is very positively influenced by the review process of the publication, which was composed mainly by student using the core results of this thesis.	

<b>Selection of sources, citation correctness</b>	<b>A - excellent.</b>
<i>Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.</i>	
Also the state-of-the-art part was positively influenced by the publication process, which required a comprehensive SOTA and a clear specification of contributions.	

**Additional commentary and evaluation**

*Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.*

Please insert your commentary (voluntary evaluation).

**III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION**

*Summarize thesis aspects that swayed your final evaluation.*

I have to highlight that student worked intensively on the thesis and significantly beyond its assignment. He helped with the video report for MBZIRC and prepared a paper, which was accepted for Lecture Notes in Computer Science and was presented at an international WoS conference. The assignment was fulfilled completely. The only drawback is relatively smaller independency of the student, which is required for final theses.

Putting these together, I evaluate handed thesis with classification grade **B - very good**.

Date: **12.1.2020**

Signature: