

I. IDENTIFICATION DATA

Thesis title:	Learning High-Speed Flight of Unmanned Aerial Vehicle in Cluttered Environments
Author's name:	Vít Knobloch
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Cybernetics
Thesis reviewer:	Robert Pěnička
Reviewer's department:	Department of Cybernetics

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	extraordinarily challenging
<i>How demanding was the assigned project?</i>	
The assigned problem was very challenging given its target beyond the current state-of-the-art.	

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>	
Student fulfilled all assigned tasks.	

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>	
Student was very proactive and independent in solving the tasks of the thesis. He come up with some nice ideas how to solve the tasks himself, and regularly consulted the progress of the works.	

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>	
I think there are no problems in the technical aspects 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>	
The thesis is written in good English and is nicely readable.	

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 cited sources are adequate for the work and the bibliographic citations meet the standards.	



THESIS SUPERVISOR'S REPORT

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

In overall, the student fulfilled all assigned tasks and present a very nice thesis that pushes the stat-of-the-art in agile flight of aerial vehicles in cluttered environment using Reinforcement Learning. The promising results of the work suggest possible future generalizing of the learned policies to unknown environments which would be a publishable result in top robotic journals. Therefore, the grade that I award for the thesis is **A - excellent**.

Date: **29.5.2023**

Signature: