

I. IDENTIFICATION DATA

Thesis title:	Perception-driven Multi-Drone Formation Control
Author's name:	Uzakov Timur
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Cybernetics
Thesis reviewer:	Prof. Paulo Lilles Jorge Drews Junior
Reviewer's department:	Universidade Federal do Rio Grande

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	ordinarily challenging
<i>How demanding was the assigned project?</i>	
The project is feasible for a master's thesis with some challenges related with the multi-drone formation control	

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>	
The presented work follow the guidelines proposed but with a proposed methodology and experiments, however the evaluation of the obtained results is weak without consistent metrics.	

Methodology	correct
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
The proposed methodology uses well known methods with minor adaptation. Thus, it appears to be correct. However, the limitation and constraint are not discussed.	

Technical level	D - satisfactory.
<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>	
Although the student presents a technically well-done work, the explanation is very limited, being very hard to understand exactly the work. There are several concepts that are never explained (e.g. the architecture of the system or the ROS-based system), and other that are explained much after it is firstly mentioned.	

Formal and language level, scope of thesis	F - failed.
<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 adopted language is not formal. The organization is not logic that makes the text very hard to understand even for an experienced researcher in the field. The thesis is not well-presented needs to be reorganized and the formalist improved. Sometimes I have an impression that the work is a technical report instead of a thesis. Several project decisions are not well justified. Even when the student try to be formal, there are lack in details or even explanation in some terms of the equations.	

Selection of sources, citation correctness	C - good.
<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 citation is ok, the main issues are a better formalization of the problem to facilitate the link between related work and the presented work. Furthermore, the citation should focus in the most important work in the field with a clear relation to the present master thesis.	

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.

The work presents an interesting problem with a simulation and real-world validation. It is welcome for a master thesis, however the present manuscript is very hard to follow and scientifically limited. The text is informal, missing details and logic to be followed. Several illustration and flowchart can help to organize the ideas and link the chapters. Furthermore, the student obtained several interesting results but the analysis is qualitative and hard to follow.

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 grade that I award for the thesis is **D - satisfactory**.

Date: **4.6.2023**

Signature: