

I. IDENTIFICATION DATA

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| Thesis name: | Reactive motion planning of a formation of helicopters for mapping of transmission sources position |
| Author's name: | Dan Šuster |
| Type of thesis : | bachelor |
| Faculty/Institute: | Faculty of Electrical Engineering (FEE) |
| Department: | Department of Control Engineering |
| Thesis reviewer: | Ing. Bc. Marek Neruda, Ph.D. |
| Reviewer's department: | Department of Telecommunication Engineering |

II. EVALUATION OF INDIVIDUAL CRITERIA

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| Assignment | challenging |
| <i>Evaluation of thesis difficulty of assignment.</i> | |
| The bachelor thesis includes the design and implementation of the motion planning algorithm for UAVs in order to estimate positions of transmission sources. The assignment also includes statistical comparison of the performance of different motion planning approaches. | |

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| Satisfaction of assignment | fulfilled |
| <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> | |
| The assignment of the bachelor thesis was fulfilled in full. | |

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| Method of conception | correct |
| <i>Assess that student has chosen correct approach or solution methods.</i> | |
| Student used several methods: description of the current techniques and using them, proposal of two approaches for object localization, simulation and real experiments. Comparison of errors is performed for two chosen approaches. | |

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| Technical level | A - excellent. |
| <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> | |
| Student read the works that are related to the topic of the bachelor thesis and the information of these works used in his experiments. The data obtained from the experiments (simulation and real measurements) are commented on as well as the used techniques. I did not find the information about the number of calculations which are used for errors evaluation. | |

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| Formal and language level, scope of thesis | A - excellent. |
| <i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i> | |
| The thesis follows the template of bachelor thesis. Abbreviation should be in alphabetical order. Not all abbreviations are presented in the list of abbreviations. English is in good level. In Fig. 3 standard citation can be used. | |

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| Selection of sources, citation correctness | B - very good. |
| <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> | |
| Thesis includes 25 citations. Citation of web pages is not complete according to CSN ISO 690. There should be a comma between square brackets of citations in the text. Student uses relevant citations, most of them is scientific paper written in English. | |

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| Additional commentary and evaluation |
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REVIEWER'S OPINION OF FINAL THESIS

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. Please present apt questions which student should answer during defense.

Student has studied the current state of knowledge, used the data for his simulations and real experiments, and discussed the results. Information from his work is well described.

What are the disadvantages of RSSI evaluation?

Do you have any suggestions how to overcome these limitations?

I evaluate handed thesis with classification grade **A - excellent**.

Date: **8.6.2018**

Signature: