

I. IDENTIFICATION DATA

Thesis name:	Resource Allocation for Communication with Multi-Access Edge Computing Exploiting Device to Device Relaying
Author's name:	Štěpán Šubík
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Telecommunication Engineering
Thesis supervisor:	Ing. Jan Plachý
Supervisor's department:	Department of Telecommunication Engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>Evaluation of thesis difficulty of assignment.</i>	
The assignment focuses on the Multi-Access computing which brings together two formerly independent research branches, the communication and computing. Thus, the assignment is challenging due to high requirements on the student's knowledge and its correct use.	

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 has been completely fulfilled.	

Activity and independence when creating final thesis	A - excellent.
<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>	
The student was attending regular meetings and was able to carry out most of the work on his own. During his work he has shown that he is capable to work and solve problems independently.	

Technical level	B - very good.
<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>	
Due to a complex problem which the Mobile-Access Edge computing is, the student had to study a lot of literature. This obtained knowledge was then exploited during development of simulations to evaluate the performance of the proposed algorithm. In Figure 5.6. the x-axis is not the same as for other figures within the results section, but this seem to be only a typo, as the results follow the general trend.	

Formal and language level, scope of thesis	B - very good.
<i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i>	
There are some minor typographical and language error, but overall the thesis is well written.	

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>	
The citations are used correctly, the novel work is clearly distinguishable from the existing one. The student selected appropriate and relevant sources. There is a minor drawback, as there could have been a few more citations, such as in chapter Simulation models and scenarios.	

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.

The thesis contains a core work which can be further extended towards a publication.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

The scope of the thesis combines communication and computing requiring knowledge from two originally separated areas. The student worked hard, and gained a wide knowledge about the problem defined in the assignment. The thesis provides a core for further work, which could be published. The thesis is of high quality, but some minor improvements are required.

Questions for defense:

1. In the thesis D2D communication exploiting radio frequency band is assumed. However, with the possibility to exploit Visible Light Communication, what modifications are required, so the proposed solution can benefit from it?
2. The thesis focuses on the technical part of the problem, but an important question is, how would you pursuit the mobile users to relay communication from the other mobile users?

I evaluate handed thesis with classification grade **B - very good**.

Date: **10.6.2019**

Signature: