Classification of Bachelor Thesis – opponent

1. **Meeting the requirements of the thesis assignment.**
   The student's bachelor thesis is a complex one with the wide area of possible research. Student presented a work that sufficiently complies with the given instructions.

2. **Thesis technicality evaluation.**
   The form of the thesis is mediocre with the formatting as its strong side and the worse English as its drawback. The logical structure could have been improved in terms of clarity and easier readability. The ratio of theoretical and practical part is approximately 3:2, which I find adequate for a bachelor thesis. I have slight objection against the figures which are not uniform, thus resulting in the worse reader's opinion.

3. **Results evaluation of the thesis.**
   The thesis presents the experimental use of the LACK method of steganography in VoIP and can be used as a proof of concept of the student's theoretical assumptions. The area could have been studied deeper and the experiment could have been better suited for the real-world traffic.

4. **Evaluation of the new findings contribution.**
   The thesis contains a compilation of known concepts and ideas and presents the student's ability to use and harness them in a limited but sufficient way.

5. **Utilization and selection of information sources.**
   I have no objections against the used references.

6. **Question for the defense of the thesis.**
   Please explain why did you use Ubuntu 12.04 (p. 18)? In my opinion, regular losses are very uncommon in the network, which results in easy detection of the hidden message/data. Have you considered using some kind of probability model of losses for you experiment? Please describe the pros and cons of using such model.

7. **Summary evaluation.**
   The thesis is of medium quality and there is number of ways how to improve it especially in the thoroughness of the experiment and English. However, in my opinion the thesis sufficiently proves the student's ability to deal with a more complex task, which the bachelor thesis is.

**Overall classification: very good**

Ostrava, 18.05.2015

Ing. Jan Rozhon, Ph.D.