Martin Rehak Department of Computers, FEE Czech Technical University in Prague

Master Thesis Assessment

Student name: **Pavel Potocek** Thesis Title: **Detection of Malicious Network Behaviour in Encrypted Traffic**

I had a pleasure to supervise the Diploma thesis of Pavel Potocek, entitled "Detection of Malicious Network Behaviour in Encrypted Traffic".

Pavel's thesis addresses the problem of building a globally-synthesized reputation feed shared across customer networks. It combines the anomaly detectors across multiple distinct networks in order to improve the malware detection performance and robustness. Pavel has performed this work as a part of our research team, working on large-scale, real-world data in the process.

The thesis is written in very good English, with few typos and grammatical imperfections. It is formally correct, presents clearly defined objectives for the work and presents the results in relatively concise way.

From the specific remarks, I'd have suggested that the Section 3.5.1 might have been simplified and most of the content moved to Appendix A. This is illustrative of larger trait of the thesis, where the formal correctness often stands in way of clarity and readability. This is further illustrated in Figures 4.1 and 4.2. The figures represent relevant and technically correct information, but are very difficult to read. On the other hand, the Figure 4.4. is very clear and illustrates the research contribution and impact.

The presentation and clarity issues are symptomatic of broader issues with the work. Pavel is a very creative and precise engineer, but needs to work on prioritization of his work effort in order to reach optimal results in the future.

With this being said, I recommend the acceptance of the Master Thesis with the grade "B" and wish Pavel good luck in his future successful career.

In Prague, on June 19, 2017

Mala helall

Martin Rehak