THESIS SUPERVISOR'S REPORT



I. IDENTIFICATION DATA

Thesis title:	A Network Dataset of Normal, Malware, Attack and Background Traffic on a Real Network
Author's name:	Štepán Bendl
Type of thesis :	Master
Faculty/Institute:	CS, FEL, CVUT
Department:	Computer science
Thesis reviewer:	Sebastian Garcia
Reviewer's department:	CS, FEL, CVUT

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment

How demanding was the assigned project?

The assignment was very demanding since the creation of state-of-the-art security datasets for the community implies a strong knowledge of network protocols, and security attacks, together with a capability to verify and evaluate every error and mistake.

Fulfillment of assignment

How well does the thesis fulfill 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.

The assignment was completely fulfilled to the original specification. From the search of the needs of the community to the creation and publication of the dataset. He even went beyond expectations by publishing a poster and drafting a journal paper during his thesis.

Activity and independence when creating the final thesis

Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted, and whether the student was well prepared for the consultations. Assess the student's ability to work independently.

The student had a very positive approach to solving the thesis, meeting all time limits, regularly consulting, and well prepared. The student can work independently.

Technical level

Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?

The thesis is technically sound, following methodologies and procedures correctly. The student clearly explained every concept.

Formal level and language level, scope of thesis

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?

All the formalisms and notations are used properly. There is a clear and methodological organization to the thesis, which is extensive and covers all the work done by the student. The thesis is presented very well and it is understandable.

Selection of sources, citation correctness

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?

The thesis does adequate references to earlier work, citing and exploring state-of-the-art papers. The original work, the dataset, is clearly distinguished.

A- Excellent

A- Excellent

A- Excellent

A- Fulfilled

A- Excellent

Challenging

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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 thesis is a good work that by fulfilling its goal will have a strong impact in the world of cyber security by making available a large dataset of security.

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

The student designed, implemented and created a novel, large, and labeled dataset for computer network security. This dataset, with almost 100,000,000 flows can be one of the top next standards in training and evaluation of security technology in the years to come for organizations, companies, and research institutes. It is a work very well done.

The grade that I award for the thesis is A

Date: 2023.06.6

Signature: