CZECH TECHNICAL UNIVERSITY IN PRAGUE
Faculty of Mechanical Engineering
12120 - Department of Automotive, Combustion Engine and Railway Engineering
Technická 4, 166 07 Prague 6, Czech Republic

SUPERVISOR'S REPORT ON THE MASTER'S THESIS

Master's thesis title..... **Simulation of AEB system testing**

Author ..... **Bc. Patrik Zíta**

Supervisor..... **Ing. Václav Jirovský, Ph.D.**

Evaluation criteria and their classification

Fulfilment of the thesis requirements and goals..... E (sufficient)

Self-action and own initiative during the thesis elaboration..... C (good)

Application of knowledge gained
by self-study and from professional literature ..... D (satisfactory)

Usage of groundwork and data from practice ..... C (good)

Professional level and contribution of the thesis ..... D (satisfactory)

Formal aspects of the thesis ..... C (good)

Further comments to the thesis:

The goal of the thesis was to develop a simulation processing system, which could be easily used for specific set-up of predefined experiments for AEB testing. Unfortunately, the thesis does not fully comply with this part of the assignment. I expect, that the company, where the student has pursued his internship, overloaded the student with other tasks unrelated to his thesis, which disabled the student from effective work on the thesis.

The thesis itself has a logic text flow, starting with introduction to the autonomous systems, sensors and software modeling and concluding with realization of predefined software tests. Unfortunately, only the chapter about software modeling of sensors fulfils the qualitative expectations of technical report or thesis. The rest of the text is too general. Introductory parts contain unreferenced statements based more on marketing messages than scientific approach (i.e. first paragraph on p.13 about dangerous drivers). Large parts of the introductory chapters are acquired from a single bibliographical sources, which degrades the quality of the state-of-the-art research. The thesis refers to 37 bibliographic sources, where unfortunately only 10 of these have a scientific background, the rest are mainly business oriented articles.

The groundwork of the thesis is presented mainly in pictures and graphs on 34 pages. This would be acceptable, if they are supported by an explanatory text focused more on the principles and technical considerations, than on the usage of the software tool and brief description of inputs. I suppose, that this chapter would not be understandable for somebody, who is not deeply informed about the work as a whole.

Finally, the language quality of the thesis experiences minor inconsistencies in the text flow and imposes one question – why the common term “ego vehicle”, which is often used in the last chapter, is written with “G” in uppercase?

The presented thesis is suffering from a currently frequent approach pursued by many students – an approach of “writing the thesis” instead of “working on thesis”. Even though the student focused more on the work with software rather than on the goal of its application, he has demonstrated some engineering approach to solving a technical task. However, the thesis does not cover all the topics in the required depth and on the expected level of engineering quality.

I **recommend** the master's thesis for the defence.

Summary classification of the master's thesis ..... D (satisfactory)

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supervisor’s name supervisor’s signature

In Prague..... September 8, 2017