Posudek oponenta bakalářské práce

Student: Aghayev Raul
Téma: Určení obsazenosti parkoviště z obrazu (id 23263)
Oponent: Zemčík Pavel, prof. Dr. Ing., UPGM FIT VUT

1.   Náročnost zadání   **průměrně obtížné zadání**
The assignment of the work has been moderately demanding but offered a very good potential for creative extensions that, unfortunately, has not been exploited by the student.

2.   Splnění požadavků zadání   **zadání splněno s vážnými výhradami**
Formally, the assignment has been fulfilled. As mentioned above, unfortunately, the student did not exploit the creative potential of the assignment when he was, in fact, even indirectly "asked" to do so by the assignment itself (point 7 of the assignment - Iterativně vylepšujte své řešení směrem "k dokonalosti"). Therefore, I have serious doubts about the results even though the assignment has been fulfilled formally.

3.   Rozsah technické zprávy   **splňuje pouze minimální požadavky**
The extent of the work is at the lower boundary of the required length, the work has 33 pages.

4.   Prezentační úroveň předložené práce   **65 b. (D)**
The level of presentation of the work is average. The structure of the thesis looks good but the state of the art presentation is very short and while it covers the very basics, I believe that the student should have paid attention to the state of the art in much wider extent.

5.   Formální úprava technické zprávy   **95 b. (A)**
On the formal side, the work is quite nice, it is written in a relatively good English and also typographically it "looks good".

6.   Práce s literaturou   **40 b. (F)**
The selection of literature sources is not bad. However, the specification of the sources is inadequate and in many of the literature items, the thesis says "not specified". It shoold be emphasized that well identification of the literature sources is the responsibility of the author so this is really not acceptable.

7.   Realizační výstup   **50 b. (E)**
The implementation output of the work is, technically, speaking, functional but it seems that the functionality is quite "basic".

8.   Využitelnost výsledků
I believe that the results are not really usable in the current state. It is functional but much better implementations of vehicle detection can be found.

9.   Otázky k obhajobě
1. In Table 6.1, you are showing that the detection process lead up to 10 incorrect detections out of 22 cars (in the "bugs fixes" version). Why is it so?
2. In Figure 6.7, it is not clear why the vehicles in the bottom right corner are not detected. Some explanation in the text says that this is due to the lamp. Please, can this be explained better?

10. Souhrnné hodnocení   **65 b. uspokojivě (D)**
I believe that the work, although technically speaking "fulfilled the assignment" did not make use of the creative potential that the assignment offered. Anyhow, the application is somehow functional and the text formally meets the requitements. Therefore, I value the work as acceptable.

Prohlášení: Uděluji VUT v Brně souhlas ke zveřejnění tohoto posudku v listinné i elektronické formě.

V Brně dne: 7. června 2021

Zemčík Pavel, prof. Dr. Ing.
oponent