

Review of Bachelor's Thesis

Student: Zaťovič Martin
Title: Real-Time Liquid Lens Focusing (id 24805)
Reviewer: Draňanský Martin, prof. Ing., Dipl.-Ing., Ph.D., DITS FIT BUT

- 1. Assignment complexity** **more demanding assignment**
I consider the difficulty of this assignment to be higher, as it is a relatively new technology. In addition, the student presented the solution in a really excellent and thoughtful way.
- 2. Completeness of assignment requirements** **assignment fulfilled**
All assignment points were met without reservations.
- 3. Length of technical report** **in usual extent**
The scope of the technical report is within the usual range.
- 4. Presentation level of technical report** **93 p. (A)**
The work has a logical structure and the individual parts follow each other. The ranges of the individual parts are balanced. The work is understandable for readers.
- 5. Formal aspects of technical report** **93 p. (A)**
The typographic side of the work is excellent. I also consider the language side of the work to be excellent, but I am not a native speaker.
- 6. Literature usage** **90 p. (A)**
The number of literary sources is rather lower, however, there are not too many sources in this area that would be linked to this modern and new technology. These sources are relevant to the work and are up to date.
- 7. Implementation results** **100 p. (A)**
The implementation output was practically shown to me and during the solution I was able to follow the partial steps. I consider the overall solution and comparison with other options to be very successful.
- 8. Utilizability of results**
The achieved results are clearly applicable in practice.
- 9. Questions for defence**
 - How could refocusing be accelerated (e.g. more powerful hardware, code optimization, algorithm change)?
 - For what focusing ranges are liquid lenses produced? Does it make sense to combine two types of liquid lenses to increase focusing speed?
- 10. Total assessment** **95 p. excellent (A)**
I consider the work to be excellent and usable in practice, especially from the implementation point of view, but the text part is also at a really high level. Overall, I propose a grade of **A** (95 points).

In Brno 2 June 2022

Draňanský Martin, prof. Ing., Dipl.-Ing.,
Ph.D.
reviewer