Brno University of Technology
Faculty of Information Technology

Review of Master's Thesis

Student: Kubíček Martin, Bc.
Title: Creating a Depth Map of Eye Iris in Visible Spectrum (id 22246)
Reviewer: Kanich Ondřej, Ing., UITS FIT VUT

1. **Assignment complexity**   **more demanding assignment**
   The assignment of this work is fairly difficult. The main goal is to create original methodology for iris scanning. The emphasis is on using visible light and merging of several images. Database should be collected and evaluated.

2. **Completeness of assignment requirements**   **assignment not fulfilled**
   Thesis describes several approaches with different cameras, lenses, lighting methods and post processing. Despite that the work lacks the final methodology. Database contains only 26 images, non of it is labelled as merged image. There is no implementation. Evaluation and comparison is only subjective without any measurement (graphs, tables, etc.).

3. **Length of technical report**   **in usual extent**
   Scope of the work is somewhere between the minimal and usual range. It is closer to the usual range, but on the other hand there is a lot of unused space and some images could be smaller.

4. **Presentation level of technical report**   **57 p. (E)**
   Logical structure and continuity of each chapter is ok. With exception to chapter 5 which is longer than the others, are scopes of the chapters fine. The biggest issue is the readability and comprehensiveness of the work. That is mainly because of a complicated sentences and strange word ordering. There are small issues like image processing theory is missing, sometimes subchapters do not have clear conclusion, etc.

5. **Formal aspects of technical report**   **55 p. (E)**
   Grammatically the main problems are the word ordering and weird sentence structure. Typographically work is also not exactly correct. There are missing dots in the labels, typos, figure references are missing in the text, 3rd level headlines inconsistencies (used in one chapter, not used in other, shown in the content list), sometimes strange spacing and unnecessary capitalization.

6. **Literature usage**   **52 p. (E)**
   Sources are up to date and they are related to the topic of the thesis. On the other hand there is not a lot of sources and majority of them are webpages. More references could be listed in the field of image processing. References in bibliography are inconsistent. Different formats of referencing are used. Position and spacing of the references in the text is also wrong. Large amount of terms used in the work are without references and some larger parts of the text in the theoretical chapters is missing references too.

7. **Implementation results**   **10 p. (F)**
   In this field I can only evaluate the database. That is without documentation, basically it is few folders with some images.

8. **Utilizability of results**
   The goals of the work had potential to extend knowledge in the field. New acquirement method could be useful in the praxis. Nevertheless there is not a description of the methodology nor evaluated database.

9. **Questions for defence**
   - Can you describe the process which lead to the few merged images which are shown in the work?
   - Can you describe your novel acquisition process?

10. **Total assessment**   **25 p. failed (F)**
    There are no results, implementation, evaluation, or methodology. The text part is mediocre at best. Huge part of the goals are only casually mentioned in the work, but not fulfilled. Overall I have evaluate this work as **F** (**25** points).

In Brno 6. June 2019

Kanich Ondřej, Ing.
reviewer