Review of Bachelor's Thesis

Student: Eliáš Radoslav
Title: Running Motion Analysis (id 23845)
Reviewer: Kolářová Jana, doc. Ing., DBME FEEC BUT

1. Assignment complexity   **average assignment**
Bachelor's thesis assignment is appropriate to the study level. The theoretical and practical part of bachelor thesis "Running Motion Analysis" are well balanced.

2. Completeness of assignment requirements   **assignment fulfilled**
The thesis assignment was fulfilled in its entirety.

3. Length of technical report   **in usual extent**
The total length of the text is 48 pages, it contains six chapters. The content is reasonable.

4. Presentation level of technical report   **93 p. (A)**
The chapters are logically arranged and contain introduction, a fundamental theory part and very good descriptions of the solved practical parts. The text is clear and has a very good formal design. The figures used (namely from the final video - application result) are very well chosen and improve the comprehensibility of the professional text.

5. Formal aspects of technical report   **92 p. (A)**
The thesis typography and language level of the work is very good.

6. Literature usage   **91 p. (A)**
The cited literary sources are appropriately chosen, the work with literature is very good.

7. Implementation results   **92 p. (A)**
The final application is based on human pose estimation and tracking by neural network, which was already published. The used algorithms are well and clearly descripted. The student's own contribution is distinguishable in the work from the publicly published ones.

8. Utilizability of results
The final application is functional and provides the desired results. For potential users - athletes provide very interesting information about the running style. I found this work very interesting for future usage.

9. Questions for defence
  • How the position of the camera in the horizontal direction affects the accuracy of joints detection?

10. Total assessment   **92 p. excellent (A)**
The final thesis is processed very well and meets all the requirements for a quality bachelor's thesis. The created application was presented to me by the student. Overall, I propose a summary grade of **A** with **92** points.

In Brno 4 June 2021

Kolářová Jana, doc. Ing.
reviewer