Diploma thesis review

Author of the thesis: Néstor Caro; FEL, ČVUT v Praze Reviewer: Václav Chudáček, Ph.D.; CIIRC, ČVUT v Praze

Diploma thesis by Néstor Caro, "Gesture classification based on electromyography" deals with actual topic of decoding electromyographical (EMG) signals into actionable information – in the case of this thesis – into the gesture classification.

First part of the thesis gives in-depth motivation and reviews the state of the art. Second gives brief insight into the neurobiological principles of the EMG. And the rest of the thesis is devoted to experimental set-up description and results.

Several classification approaches for gesture classification were implemented and compared to the manually acquired labels. Post processing methods were devised in order to tackle errors related to the non-physiological behavior of the classifier. The results of the work are well described and the methodology used to achieve the results is sound.

The text is well written and illustrative figures and graphs help convey clearly the main points of the thesis to the reader.

The work fulfilled all points of the assignment. With regard to the amount and quality of the work presented in the thesis I suggest to award the grade "**A** - excellent".

Questions:

- What steps are necessary to achieve the real-time capability of your algorithm?
- Did you evaluate accuracy of the Myo armband's software alone?

Praha 6.6.2016

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Václav Chudáček