

I. IDENTIFICATION DATA

Thesis title:	System pro měření hemodynamických parametrů
Author's name:	Dominik Šidlo
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Cybernetics
Thesis reviewer:	Richard Grünes
Reviewer's department:	Department of Biomedical Technology

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>How demanding was the assigned project?</i>	
The project includes hardware and software implementation and its complexity corresponds to the master's thesis.	

Fulfilment of assignment	fulfilled
<i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	
The project was fulfilled in all points of the assignment.	

Methodology	outstanding
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
The selection of individual system components and the implementation of the software application meets the requirements of the assignment and is at a very high level.	

Technical level	A - excellent.
<i>Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?</i>	
The student is able to orientate well in problems and all topics are elaborated in detail and clearly.	

Formal and language level, scope of thesis	B - very good.
<i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	
My only comment is on the inclusion of Chapter 6.4 Measurement uncertainty in the Results, its inclusion in the Methods would be more appropriate. The chapter Methods in the work is missing, here it would be, in my opinion, appropriate to include the filters settings and the signal processing itself, as is usual in technically focused theses.	

Selection of sources, citation correctness	A - excellent.
<i>Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?</i>	
The choice of sources is appropriate and the thesis also meets the requirements for correct citations.	

Additional commentary and evaluation (optional)
<i>Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.</i>
Please insert your comments here.

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

In Chapter 6.1 Blood pressure, you state that it was difficult to measure similar values on the Omron Blood Pressure Monitor and on your system. Wouldn't it possible to measure blood pressure on one cuff at the same time? The Omron HEM-907 offers a manual measurement mode where an external pressure source can be used. Think about whether such a solution would cause a measurement inaccuracy.

The grade that I award for the thesis is **A - excellent**.

Date: **26.8.2020**

Signature:

