



# Supervisor's statement of a final thesis

**Student:** Jan Hroch  
**Supervisor:** MSc. Juan Pablo Maldonado Lopez, Ph.D.  
**Thesis title:** Facial feature detection  
**Branch of the study:** Knowledge Engineering

**Date:** 18. 5. 2018

<p><i>Evaluation criterion:</i></p> <p><b>1. Difficulty and other comments on the assignment</b></p>	<p><i>The evaluation scale: 1 to 5.</i></p> <p>1 = extremely challenging assignment, 2 = rather difficult assignment, <b>3 = assignment of average difficulty,</b> 4 = easier, but still sufficient assignment, 5 = insufficient assignment</p>
<p><i>Criteria description:</i> Characterize this final thesis in detail and its relationships to previous or current projects. Comment what is difficult about this thesis (in case of a more difficult thesis, you may overlook some shortcomings that you would not in case of an easy assignment, and on the contrary, with an easy assignment those shortcomings should be evaluated more strictly.)</p>	
<p><i>Comments:</i></p> <p>The assignment level is suitable for the bachelor level.</p>	
<p><i>Evaluation criterion:</i></p> <p><b>2. Fulfilment of the assignment</b></p>	<p><i>The evaluation scale: 1 to 4.</i></p> <p><b>1 = assignment fulfilled,</b> 2 = assignment fulfilled with minor objections, 3 = assignment fulfilled with major objections, 4 = assignment not fulfilled</p>
<p><i>Criteria description:</i> Assess whether the thesis meets the assignment statement. In Comments indicate parts of the assignment that have not been fulfilled, completely or partially, or extensions of the thesis beyond the original assignment. If the assignment was not completely fulfilled, try to assess the importance, impact, and possibly also the reason of the insufficiencies.</p>	
<p><i>Comments:</i></p> <p>The assignment was satisfactorily fulfilled.</p>	
<p><i>Evaluation criterion:</i></p> <p><b>3. Size of the main written part</b></p>	<p><i>The evaluation scale: 1 to 4.</i></p> <p><b>1 = meets the criteria,</b> 2 = meets the criteria with minor objections, 3 = meets the criteria with major objections, 4 = does not meet the criteria</p>
<p><i>Criteria description:</i> Evaluate the adequacy of the extent of the final thesis, considering its content and the size of the written part, i.e. that all parts of the thesis are rich on information and the text does not contain unnecessary parts.</p>	
<p><i>Comments:</i></p> <p>The length of the text is appropriate.</p>	
<p><i>Evaluation criterion:</i></p> <p><b>4. Factual and logical level of the thesis</b></p>	<p><i>The evaluation scale: 0 to 100 points (grade A to F).</i></p> <p>90 (A)</p>
<p><i>Criteria description:</i> Assess whether the thesis is correct as to the facts or if there are factual errors and inaccuracies. Evaluate further the logical structure of the thesis, links among the chapters, and the comprehensibility of the text for a reader.</p>	
<p><i>Comments:</i></p> <p>Jan put a great deal of effort in explaining the concepts behind his work.</p>	
<p><i>Evaluation criterion:</i></p> <p><b>5. Formal level of the thesis</b></p>	<p><i>The evaluation scale: 0 to 100 points (grade A to F).</i></p> <p>100 (A)</p>
<p><i>Criteria description:</i> Assess the correctness of formalisms used in the thesis, the typographical and linguistic aspects, see Dean's Directive No. 26/2017, Article 3.</p>	
<p><i>Comments:</i></p> <p>The language is suitable for an academic work.</p>	
<p><i>Evaluation criterion:</i></p> <p><b>6. Bibliography</b></p>	<p><i>The evaluation scale: 0 to 100 points (grade A to F).</i></p> <p>90 (A)</p>

*Criteria description:*  
Evaluate the student's activity in acquisition and use of studying materials in his thesis. Characterize the choice of the sources. Discuss whether the student used all relevant sources, or whether he tried to solve problems that were already solved. Verify that all elements taken from other sources are properly differentiated from his own results and contributions. Comment if there was a possible violation of the citation ethics and if the bibliographical references are complete and in compliance with citation standards.

*Comments:*  
The bibliography is appropriate (reference types, citations), and the difference with previous approaches is properly acknowledged.

*Evaluation criterion:* *The evaluation scale: 0 to 100 points (grade A to F).*

**7. Evaluation of results, publication outputs and awards** **90 (A)**

*Criteria description:*  
Comment on the achieved level of major results of the thesis and indicate whether the main results of the thesis extend published state-of-the-art results and/or bring completely new findings. Assess the quality and functionality of hardware or software solutions. Alternatively, evaluate whether the software or source code that was not created by the student himself was used in accordance with the license terms and copyright. Comment on possible publication output or awards related to the thesis.

*Comments:*  
The results do not bring any new findings, but rather highlight different practical tricks to improve the quality and stability of the models, which in many ways is more significant than improving state of the art.

*Evaluation criterion:* *No evaluation scale.*

**8. Applicability of the results**

*Criteria description:*  
Indicate the potential of using the results of the thesis in practice.

*Comments:*  
The results can be readily applied and this is illustrated nicely by Jan's follow-up work implementing his model to detect facial features from video.

*Evaluation criterion:* *The evaluation scale: 1 to 5.*

**9. Activity and self-reliance of the student**

*9a:*  
**1 = excellent activity,**  
*2 = very good activity,*  
*3 = average activity,*  
*4 = weaker, but still sufficient activity,*  
*5 = insufficient activity*

*9b:*  
**1 = excellent self-reliance,**  
*2 = very good self-reliance,*  
*3 = average self-reliance,*  
*4 = weaker, but still sufficient self-reliance,*  
*5 = insufficient self-reliance.*

*Criteria description:*  
Review student's activity while working on this final thesis, student's punctuality when meeting the deadlines and consulting continuously and also, student's preparedness for these consultations. Furthermore, review student's independency.

*Comments:*  
He took great initiative and showed self-confidence on his own skills, ideas and resources.

*Evaluation criterion:* *The evaluation scale: 0 to 100 points (grade A to F).*

**10. The overall evaluation** **95 (A)**

*Criteria description:*  
Summarize the parts of the thesis that had major impact on your evaluation. The overall evaluation **does not** have to be the arithmetic mean or any other formula with the values from the previous evaluation criteria 1 to 9.

*Comments:*  
I believe the work is nicely written and the results are readily applicable. It is clear that Jan is familiar in a booming field (deep learning for computer vision), which will put him ahead in his future studies or professional life.

Signature of the supervisor: