

# Review report of a final thesis

Czech Technical University in Prague

Faculty of Information Technology

**Student:** Martin Šmíd  
**Reviewer:** RNDr. Kateřina Trlifajová, Ph.D.  
**Thesis title:** Job-board predictions  
**Branch of the study:** Computer Science

**Date:** 13. 6. 2017

<i>Evaluation criterion:</i>	<i>The evaluation scale: 1 to 5.</i>
<b>1. Difficulty and other comments on the assignment</b>	<b>1 = extremely challenging assignment, 2 = rather difficult assignment, 3 = assignment of average difficulty, 4 = easier, but still sufficient assignment, 5 = insufficient assignment</b>
<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.)	
<i>Comments:</i> This final thesis concerns predictive models of the number of responses to the job advertisements. It's necessary to work with a great amount of data and to use statistical methods. Several models are proposed and compared.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 1 to 4.</i>
<b>2. Fulfilment of the assignment</b>	<b>1 = assignment fulfilled, 2 = assignment fulfilled with minor objections, 3 = assignment fulfilled with major objections, 4 = assignment not fulfilled</b>
<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.	
<i>Comments:</i> The assignment was quite demanding nevertheless it was almost fulfilled.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 1 to 4.</i>
<b>3. Size of the main written part</b>	<b>1 = meets the criteria, 2 = meets the criteria with minor objections, 3 = meets the criteria with major objections, 4 = does not meet the criteria</b>
<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.	
<i>Comments:</i> The extent is adequate, some parts could be described more in detail.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
<b>4. Factual and logical level of the thesis</b>	<b>85 (B)</b>
<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.	
<i>Comments:</i> The text has a good logical structure. It's written concisely, mostly comprehensibly, somewhere too briefly. The student uses advanced statistical methods and graphs. The English is very good.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
<b>5. Formal level of the thesis</b>	<b>70 (C)</b>
<i>Criteria description:</i> Assess the correctness of formalisms used in the thesis, the typographical and linguistic aspects, see Dean's Directive No. 14/2015, Article 3.	
<i>Comments:</i> Some pictures are too small and not sufficiently described, for instance 3.3. - 3.9. There are several small typographical mistakes in the hyphenation. I miss the precise information about the source of the dataset sample, especially about its relation to Czech Republic.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
<b>6. Bibliography</b>	<b>85 (B)</b>
<i>Criteria description:</i> 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 method of the solution is quite well described and documented. All references are in bibliography. The student uses but internet sources which are properly quoted.

*Evaluation criterion:*

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

**7. Evaluation of results, publication outputs and awards**

**80 (B)**

*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 prediction of the number of advertisement respondents is a complicate question depending on many factors. This thesis proposes a partial result which is not too precise as the student honestly admits. But it can be considered as a step on the road. Moreover, the thesis brings some interesting correlations. They are not too surprising, nevertheless it's interesting they are confirmed by statistiale methods.

*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:*

See above.

*Evaluation criterion:*

*No evaluation scale.*

**9. Questions for the defence**

*Criteria description:*

Formulate any question(s) that the student should answer to the committee during the defence (use a bullet list).

*Questions:*

What is the source of the dataset sample consisting of 727 records?

How did you obtain the figure 3.35 of variable importances?

*Evaluation criterion:*

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

**10. The overall evaluation**

**80 (B)**

*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:*

The thesis uses a knowledge from several branches: data and text mining, statistical methods and data analysis. The student had to make his own effort to orient in given issues and find a new solution. There are some small problems described above, some parts are not sufficiently explained.

Signature of the reviewer: