

# Bachelor Thesis Review

Faculty of Mathematics and Physics, Charles University in Prague

**Thesis author** Aakash Ravi  
**Thesis title** Machine learning-based identification of separating features in molecular fragments  
**Year submitted** 2017  
**Study program** Computer Science  
**Study branch** General computer science

**Review author** Petr Škoda Reviewer  
**Department** Department of Software Engineering

**Overall** good    OK    poor    insufficient

	good	OK	poor	insufficient
Assignment difficulty		X		
Assignment fulfilled		X		
Total size <small>... text and code, overall workload</small>		X		

**Thesis Text** good    OK    poor    insufficient

	good	OK	poor	insufficient
Form <small>... language, typography, references</small>	X			
Structure <small>... context, goals, analysis, design, evaluation, level of detail</small>		X		
Problem analysis		X		
Developer documentation		X		
User documentation			X	

- Some images are of lower quality (page 4, 30).
- The big picture of the algorithm is given, there are comments in the source code, but there is no additional developer or user documentation in the text. However, taking into account the focus of the thesis, the given extend of documentation is sufficient.
- The performance (chapter of 5.4.2) of tested method is far bellow average of other benchmarking algorithms. Still, the heat map on page 47 and text in chapter 5.4.2 may cause opposite impression. It would be nice to include results of another method to provide the reader with context.

**Thesis Code** good    OK    poor    insufficient

	good	OK	poor	insufficient
Design <small>... architecture, algorithms, data structures, used technologies</small>		X		
Implementation <small>... naming conventions, formatting, comments, testing</small>		X		
Stability		X		

The performance of the designed and implemented method is weak. However, the design decisions and related discussion are reasonable. Author provide a possible explanation of the performance and directions for further research in this area.

**Overall grade** Velmi dobře  
**Award level thesis** Ne

20.1.2017

Signature