Review of Doctoral Thesis

Thesis: Evolution and Adaptability of Complex Applications

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Review

This thesis covers some topics of the area of evolution and adaptability of complex applications. There are 10 author’s papers related to these topics: 1 article in a journal and 9 conference papers. 4 papers have been published in proceedings of ranked conferences (see Core Ranking 2014): one conference is ranked as C, two conferences as B, first of all, one conference is ranked as A (ISD 2013). One article has been published in a journal in the 4th quartile of Web of Science. Although the number of papers in top ranked journals and conferences is not high, there is one paper in a conference ranked as A.

The language of the thesis is good, the document is mostly clear and readable. In the previous version of the thesis, from my point of view, I found a common issue in more chapters; the context of the work related to existing approaches has not been described.

Now it seems that this issue is eliminated. Mainly, in chapters 4–8 there are sections 'Related Works' and 'Comparison of the Related Works'. Although these chapters include sentences like this: 'Since there are no existing approaches providing similar abilities, it is not possible to compare our solution and results of others.' the proposed comparison is rather sufficient. Moreover, in Section 9, author describes a complex example of the evolution process of an information system in various real-world scenarios.

Other notices:

- Page 88: The paper presents an approach to automatic generation ...
- Page 187: appraisal - it seems that 'estimation' is more appropriate.
Conclusion

The author published his results in a number of papers (one paper is in a conference ranked as A), in this way, he proved an impact in the related topics of the computer science. I recommend accepting this work as a PhD thesis.

In Ostrava, September 6, 2017

Michal Krátký