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 9 author's papers related to these topics: 1 article in a journal and 8 conference papers. 3 papers have been published in proceedings of ranked conferences (see Core Ranking 2014): one conference is ranked as C, one conference as B, first of all, one conference is ranked as A. 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. However, I found a common issue in more chapters; it seems that the context of the works related to these chapters is not clear. 4 chapters (chapters 4–7) from 7 chapters introducing the original work of the author include a sentence like: 'Since there are no existing real-world projects that provide similar abilities, it is not possible to compare our solution and results of others'. Chapters 3 and 8 also do not not include any comparison with other existing applications. Authors proposed that there are many works related to schema mapping (the topic of Chapter 8), therefore it is surprise that also this section does not provide any comparison. In Section 9 (Undo/Redo Operations in Complex Environments) there is only a short sentence: 'The ability of the proposed algorithms was compared with other similar solutions like Visual Studio [18] or Enterprise Architect [95].' without any detail description. What does it mean? Author defines the new 7 original research topics? I do not think so. The author has to explain this issue.

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, however, the author should explain the above-mentioned issue.

In Ostrava, August 31, 2016

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