# Responses to Editor-in-Chief & Reviewer Comments

October 12, 2017

## Overview

We appreciate these quite thorough reviews. We appreciate the feedback and suggestions.

# Editor

Thank you for these detailed comments, which we respond to individually below.

*Comments from Editor:*

*15-Sep-2017*

*Dear Dr. Young-Kyoon Suh:*

*Manuscript ID TIIS-IS-2017-Jul-0844 entitled "MLPPI Wizard: An Automated Multi-level Partitioning Tool on Analytical Workloads" which you submitted to the KSII Transactions on Internet and Information Systems, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter.*

*I am happy to inform you that the reviewer(s) have recommended publication, but also suggest some revisions to your manuscript. Therefore, I invite you to respond to the reviewer(s)' comments and revise your manuscript. Please go through the reviewers' comments carefully and then prepare for the revised paper and authors' response. Your revised paper will not be guaranteed to be accepted for publication in the TIIS journal. The editor and reviewers will again review the revised paper and authors response.*

In this response letter we address each of the reviewers' comments with care. We have incorporated into the revision our response to each comment.

*To upload your revised manuscript, log into https://mc.manuscriptcentral.com/tiisjournal and enter your Author Center, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision.*

We used this procedure for uploading the revision.

*You may also click the below link to start the revision process (or continue the process if you have already started your revision) for your manuscript. If you use the below link, you will not be required to login to ScholarOne Manuscripts.*

*\*\*\* PLEASE NOTE: This is a two-step process. After clicking on the link, you will be directed to a webpage to confirm. \*\*\**

*https://mc.manuscriptcentral.com/tiisjournal?URL_MASK=963223d1218947b5b5750544c56a74b6*

Thank you for this additional information.

*1. Revise your manuscript "by using the MS Word."*

Yes, we used the MS word program for revising our article.

*2. Please highlight the changes to your manuscript within the document by using bold and colored text "in BLUE" or by using the track changes mode in MS Word.*

OK, the contents in response to the reviewer's comments are colored in **blue** with a bold face. In addition, corrections made are colored in red for distinction from the new (or revised) contents.

*3. In addition to the revised manuscript, the authors are required to write the authors response answering the reviewers comments. In order to expedite the processing of the revised manuscript, please be as specific as possible in your response to the reviewer(s)' comments.*

This written response letter satisfies your requirement. It includes the respective response to each of the two reviewer's comments.

*4. The authors response should be included in "the first page of the revised manuscript."*

Our submission includes this letter in the front page of the revised article.

*Once the revised manuscript is prepared, you can upload it and submit it through your Author Center.*

*[IMPORTANT]: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.*

We deleted any redundant files during the uploading process.

*Because we are trying to facilitate timely publication of manuscripts submitted to the KSII Transactions on Internet and Information Systems, your revised manuscript should be uploaded "by 15-Oct-2017." If it is not possible for you to submit your revision in the deadline, we may have to consider your paper as a new submission.*

Today (**October 13th, 2017 in KST**), prior to the specified deadline of October 15, 2017, the revised manuscript has just been uploaded for further review.

*Once again, thank you for submitting your manuscript to the KSII Transactions on Internet and Information Systems and I look forward to receiving your revision.*

*Sincerely,*

*Dr. Mohammad Shojafar*

*Editor,*

*mohammad.shojafar@uniroma1.it*

*KSII Transactions on Internet and Information Systems*

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# Reviewer 1

We totally agree with you. The old Fig. 1 is not at a real figure. We feel that it had better be put into a table for further reference, which is now Tab. 1 on page 3.

We significantly expanded the architecture, which is now Fig. 1 on page 7, with a specified description of each phase. In addition, the figure shows (1) the input query workload text, which is used throughout the paper (on the top), and (2) the output solution produced by the wizard (on the bottom), for better clarification.

Thanks for the comments. To address your concern, we put in tabular form the table with its caption on page 2 (now, Tab. 2). Note that we tabularized other examples for better exposition in the introduction.

We took out some contributions mentioned in Section 2 (now Section 3) and then incorporated them into the contribution paragraph (on page 5 in the revision), which is now substantially extended.

Please see Section 5.1 (more specifically, the third to fifth paragraphs in that section), where we address the use of synthetic queries in general from to represent a realistic scenario. We do have a mention of reproducibility of our work (as described in the the second-to-last paragraph).

After reading your comment we realized that Fig. 5, which is now removed, was confusing. We replaced it by a comparison table (now Tab. 9 on page 19) that shows that the proposed wizard outperforms the compared approaches.

*Also, Authors should give a more clear definition of the "application type" used in the paper. For example, what information of applications are used and how to obtain this information.*

The application type of the proposed wizard is a <u>physical database design tool</u> (fundamentally different from several existing works [4–6]. Also note that any complex workload, giving many different partitioning options, can benefit from the automated wizard to find almost an optimal solution. For more details, please refer to the first, third, and fourth bullets in the Contribution paragraphs in the Introduction section.

*Last but not least backs to the background which is limited and some hot-related works are missing that are listed in i)"Using imperialist competition algorithm for independent task scheduling in grid computing" and ii) "A hybrid metaheuristic algorithm for Job scheduling on computational grids" that addressed the analytical workload exploitation in the real case studies that must be added in the background to make your work holistic for the future readers.*

OK, we now have some mentions of the above two works compared to our work. Of course, we have added these two in the references ([27, 28]) in the revision.

# Reviewer 2

Yes, we addressed each of your comments as follows.

*1. Abstract could be better write, in this reviewer point of view, the current abstract is not comprehensive.*

OK. We totally rewrote the abstract to reflect this comment.

*2. The manuscript could be better organize as well. For instance, the related works section could be placed after introduction section no before conclusion.*

A great suggestion. We have relocated the related work section right after the introduction in the revision. Note that the related work section is extended with some new references that are added to respond to another reviewer's comment.

*3. Providing a comparison table could be useful for readers.*

Yes, we now provide Tab. 9 for better clarity on the comparison.

*4. Conclusion is too long.*

OK, we shortened the Conclusion section, which now sounds more concise.

*5. Introduction section need more references.*

We've added some references in the Contribution paragraph in the introduction on page 5.