McMaster University

Dr. Spencer Smith, Associate Professor
Computing and Software Department
Faculty of Engineering
McMaster University
1280 Main Street West
Hamilton, Ontario, Canada L8S 4K1

Telephone: (905) 525-9140 ext. 24131
email: smiths@mcmaster.ca
Web: http://www.cas.mcmaster.ca/~smiths

September 30, 2022

Dr. Eugenio Oñate
Editor-in-Chief
Archives of Computational Methods in Engineering

Re: Revisions to ARCO-D-22-00308R1, State of the Practice for Lattice Boltzmann Method Software

Dear Dr. Oñate:

Thank you and the reviewer for the feedback on our submission. In response to your e-mail, dated August ?, 2022, we have revised the paper to incorporate the requested revisions. We have also removed the anonymous .... A summary is given below. Modifications in the revised submission are highlighted in colour. A version of the paper showing all additions and deletions is included with the re-submission.

We would like to thank you and the reviewer for their thoughtful and constructive comments.

Reviewer #1

1. The anonymization of the authors poses some challenges in evaluating the paper because the citations for the methodology and the raw data underlying the study have been anonymized away.

   Removed anonymization.

2. I think it would be useful to have slightly more by way of explanation here – to provide a bit more understanding of the process followed for readers who choose not to pursue the details provided in the reference. Two key steps to put a little more flesh around would be (1) how are the entries of the measurement template (Fig 2) turned into a single numerical score for the section, and (2) how is the aggregate AHP score obtained? As to the first point, for example, I look at the Installability Overall Impression scores, which I initially took to be a numerical score for installability, but in the AHP Installability scores shown in Fig 3, there is no correlation between the number in the measurement template and the final score..

   Response.

I n Fig 2, I see responses for "Descriptive error messages?" of yes, no, and n/a. I have a hard time imagining what n/a could mean in this context. Presumably the installer either provides descriptive error messages or it does not? Is this explained in one of the anonymized references or in the raw dataset, which I can't access either due to anonymization.

Response.

3. AHP is left completely to outside references, and I think it would be beneficial to have at least a brief description here.

   Response.

4. I think there was a statement that AHP weights all of the qualities equally, but in the graphs of the scores for various qualities (e.g., Figs 3-6), there are dramatic differences in the ranges of the scores given to the packages – anywhere from 0.06 as the top score to nearly 0.16. The highest overall score is 0.075 (Fig 12). So what is the *theoretical* top score in any category and overall? Are there some categories in which even the highest-scoring packages are quite low on the absolute scale? If so, I would think such situations deserve some discussion.

   Response.

Best regards,

Spencer Smith