



**DATE:** April 20, 2022

**TO:** Academic Editor, PeerJ Computer Science

**FROM:** Andrew Fisher, Department of Computer Science  
Lakehead University, Thunder Bay, ON, Canada P7B 5E1

**RE:** Article resubmission.

Dear Editor,

We wish to submit a revised copy of our article entitled " An ethical visualization of the NorthCOVID-19 model" for consideration by PeerJ Computer Science. We can attest that this is an original article that has not been published elsewhere, nor is it currently under submission for publication elsewhere.

We have carefully reviewed the concerns and believe they were addressed with an update of our open-source repository as well as minor changes to the manuscript (highlighted in blue). Please see our point-by-point response in the pages following this cover letter.

We have no conflicts to disclose.

Please address all correspondence concerning this article to me at [afisher3@lakeheadu.ca](mailto:afisher3@lakeheadu.ca).

Thank you for taking the time to consider this article.

Sincerely,

Andrew Fisher  
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Web: <http://www.datalab.science>

Reviewer 1 (Monika Heiner)

Basic reporting

() re individual contributions of all authors: I assume that this will be visible in the final paper; so far this information is not included.

Yes, the author contribution breakdown was provided in the PeerJ submission itself.

() <https://github.com/andrfish/NorthCOVID19>, Video Generation Script for the COVID Crushers, introductory comment:

"This script takes input from NorthCOVID-19 (see model here) and produces a video animation (see sample\_format.pdf) of the results. The file "sample\_output.csv" is an example of what the output will look like, "sample\_parameters.json" is an example saved file of the parameters used, and "sample\_results.json" is an example of the results output to the website from the simulation."

-> none of the links work - 'NorthCOVID-19', 'model';

for some of the pointers there are no links given at all, eg. sample\_format.pdf, sample\_results.json, sample\_parameters.json.

Thank you for pointing this out, we have corrected the links for "NorthCOVID-19" and "model".  
For the files, we have now included them in our repository  
(<https://github.com/andrfish/NorthCOVID19>).

() "The result was a video"

thanks for adding the video generation feature to the original website

<https://covid.datalab.science>; I suggest to move the link to this website, hidden so far in a footnote, to a more prominent position.

We have moved this link in-line towards the top of page 2.

() "Please do not leave this page, the generation may take up to 10 minutes and the download will start automatically."

-> having to wait up to 10' (it actually took almost as long) is a rather long delay for getting something simplified compared to what I immediately get and comprises actually more information.

For the video generation process, each slide is first rendered and saved based on their respective statistics using the OpenCV and Matplotlib libraries. Then, each slide is combined and rendered again to get the final result that the user receives. We opted for it to play back at 60 frames per second to give smooth animations, for a total of roughly 7,200 frames to render in up to 10 minutes. A real-time implementation wasn't considered for this study so we have added this optimization constraint to our limitations towards the top of page 11.

() the last slide in the generated "video" (is more a sequence of slides) needs some normalisation to make the results visible.

We appreciate this feedback but felt that normalizing it would add another complexity for the general public to understand rather than displaying the actual values. This is now emphasized towards the end of the "Issues" subsection on page 4.

in summary,

I'm still amazed how many words one can spend for explaining and justifying the design of a simplified user interface. I personally would prefer the direct output as offered by the original website <https://covid.datalab.science>; not to say that I somehow feel offended that I - as a user - is considered not to be able to understand what the original diagrams are telling me.

But I'm happy to accept that I might not belong to the actual target group of the tool.

Thank you for your understanding, we certainly did not intend for the output to be directed towards researchers. Rather, it is for the general public which we hope is clear to readers from our "Public Understanding" and "Issues" sections.