

Letter to R Journal Editor for Resubmission #2 of 2021-73

Joe Zemmels, Susan VanderPlas, and Heike Hofmann

Dear Professor Catherine Hurley,

We are requesting a second reconsideration of our R Journal submission 2021-73. We have made substantial changes to our submission in response to the reviewers' constructive feedback.

The biggest feedback we received from the second round of reviewer comments was that our critical tone could be further refined. In particular, our tone was perceived as combative towards the researchers at NIST as a whole. In this second resubmission, we strike a more aspirational tone by pointing out, yet not dwelling on, the fact that there are conceptual gaps in the published CMC papers that need to be filled in to properly implement the method. We use this to emphasize the benefits that a culture of open-source would bring to the forensics community at-large.

Apart from tweaking the tone of the paper, we also made specific changes to the introduction of the paper per one reviewer's comments. We were asked to acknowledge the fact that (random) sampling procedures such as Markov Chain Monte Carlo do not yield identical results upon repeated execution. We acknowledge this fact by pointing out that setting a random seed prior to using a random sampling procedure leads to identical, and therefore reproducible, results. Secondly, we removed the language of "pattern-matching algorithms" from the paper because, as pointed out by one reviewer, the comparison of evidence such as glass does not fall under the category of "pattern-matching." Finally, we removed the word "unique" from our analogization of breech face impressions to fingerprints as uniqueness of these markings is neither scientifically supported nor legally required.

Please note that the current version of the paper relies on the most recent Github version of cmcR: <https://github.com/CSAFE-ISU/cmcR>. In case additional edits of the paper are required, we are waiting to submit this newest version of the package to CRAN. We will submit the newest version to CRAN as soon as the paper is accepted.

Thank you again for your consideration,

Joseph Zemmels, Susan VanderPlas, and Heike Hofmann