

Review of: "Artifact Subspace Reconstruction (ASR) for electroencephalography artifact removal must be optimized for each unique dataset"

Behnaz Sohani¹

¹ University of Lincoln

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Review

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The overall impression is that this research is ambitious and worth posting. The research aim to remove EEG artefacts for unique datasets is vital for results accuracy in myriad clinical and non-clinical applications. However, Artefact subspace reconstruction (ASR) term seems misleading as artefact rejections have been done throughout the paper.

Please consider the following points which should be corrected/clarified:

- First, there are several mistakes in typing, for example in page 8: "significant difference" instead of "significant different" should be used, and so on.
- To improve the quality of that, the results could be presented in pictorial forms, since going through such a large set of data is time consuming and may confuse the readers to conclude the analysis at a glance.
- A future work should be added to conclusion section. Authors can probably use their statement in their manuscript, *As such, researchers should investigate what type of artefacts exist in their data set a priori and keep track of whether those artefacts are being rejected or if more brain signals are being rejected.* for that. I mean type of artefact from the

EEG signal and then ASR algorithm suggests optimal parameter choice based on the type of artefacts to automate this process further.