CORRECTION Open Access



Correction: On the usage of average Hausdorff distance for segmentation performance assessment: hidden error when used for ranking

Orhun Utku Aydin^{1*}, Abdel Aziz Taha², Adam Hilbert¹, Ahmed A. Khalil^{3,4,5}, Ivana Galinovic³, Jochen B. Fiebach³, Dietmar Frey¹ and Vince Istvan Madai^{1,6}

Correction: Eur Radiol Exp 5, 4 (2021) https://doi.org/10.1186/s41747-020-00200-2

The original article [1] contains a minor notation error in the Methods section of the article regarding the description of the terms "GtoS" and "StoG" in Equation 2 and Equation 3 on page 2 of the PDF version.

The original article states:

"where GtoS is the directed average Hausdorff distance from ground truth to segmentation, StoG is the directed average Hausdorff distance from segmentation to ground truth, G is the number of voxels in the ground truth, and S is the number of voxels in the segmentation."

This statement should be disregarded in favour of the following statement:

"where GtoS is the sum of all minimum distances from all points from the ground truth to segmentation, StoG is the sum of all minimum distances from all points from the segmentation to ground truth, G is the number of voxels in the ground truth, and S is the number of voxels in the segmentation."

The original article can be found online at https://doi.org/10.1186/s41747-020-00200-2.

*Correspondence: orhun-utku.aydin@charite.de

¹ CLAIM - Charité Lab for Artificial Intelligence in Medicine, Charité Universitätsmedizin Berlin, Berlin, Germany Full list of author information is available at the end of the article This notation error is also present in the Abbreviations section of the article and should be corrected as well.

The original article states:

"GtoS: Directed average Hausdorff distance from ground truth to segmentation

StoG: Directed average Hausdorff distance from segmentation to ground truth"

This statement should be disregarded in favour of the following statement:

"GtoS: the sum of all minimum distances from all points from the ground truth to segmentation

StoG: the sum of all minimum distances from all points from the segmentation to ground truth"

The authors would importantly like to note that this notation error does not have an impact on the results of our paper.

The authors also note that the terms StoG and GtoS are used correctly in other sections of the article and the notation error only affects the Methods and Abbreviations sections.

Author details

¹CLAIM - Charité Lab for Artificial Intelligence in Medicine, Charité Universitätsmedizin Berlin, Berlin, Germany. ²Research Studio Data Science, Research Studios Austria, Salzburg, Austria. ³Centre for Stroke Research Berlin, Charité Universitätsmedizin Berlin, Berlin, Germany. ⁴Department of Neurology, Max



© The Author(s) 2022. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany. ⁵Mind, Brain, Body Institute, Berlin School of Mind and Brain, Humboldt-Universität Berlin, Berlin, Germany. ⁶School of Computing and Digital Technology, Faculty of Computing, Engineering and the Built Environment, Birmingham City University, Birmingham, UK.

Published online: 31 October 2022

Reference

 Aydin OU, Taha AA, Hilbert A et al (2021) On the usage of average Hausdorff distance for segmentation performance assessment: hidden error when used for ranking. Eur Radiol Exp. 5:4. https://doi.org/10.1186/ s41747-020-00200-2

Submit your manuscript to a SpringerOpen journal and benefit from:

- ► Convenient online submission
- ► Rigorous peer review
- ► Open access: articles freely available online
- ► High visibility within the field
- ► Retaining the copyright to your article

Submit your next manuscript at ▶ springeropen.com