



OPEN

RETRACTED ARTICLE: An attention-based multi-residual and BiLSTM architecture for early diagnosis of autism spectrum disorder

Rami S. Alkhawaldeh, Jamil Alshaqsi, Bilal Al-Ahmad, Samar M. Alkhawaldeh & Osama Drogham

Retraction of: Scientific Reports <https://doi.org/10.1038/s41598-025-19006-6>, published online 29 September 2025

The Editors have retracted and removed this publication. Concerns were raised regarding the use of images of minors from a non-curated dataset. The dataset is reported to contain images of children with autism spectrum disorder (ASD). However, the images appear to have been collected from the internet without any documented clinical history or confirmation of an actual ASD diagnosis. Additionally, there is no documented ethical oversight, or consent of the children included in the dataset or their parents and legal guardians.

In light of these ethical concerns and the reliance on unverifiable data, the Editors no longer have confidence in the reliability of this Article.

Author Rami S. Alkhawaldeh has stated that the authors disagree with this retraction.

Published online: 29 September 2025

Additional information

Correspondence and requests for materials should be addressed to R.S.A.

Reprints and permissions information is available at www.nature.com/reprints.

Open Access This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, 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 you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. 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-nc-nd/4.0/>.

© The Author(s) 2025

