A strawman with machine learning for a brain: A response to Biedermann (2022) the strange persistence of (source) “identification” claims in forensic literature

We agree wholeheartedly with Biedermann (2022) FSI Synergy article 100222 in its criticism of research publications that treat forensic inference in source attribution as an “identification” or “individualization” task. We disagree, however, with its criticism of the use of machine learning for forensic inference. The argument it makes is a strawman argument. There is a growing body of literature on the calculation of well-calibrated likelihood ratios using machine-learning methods and relevant data, and on the validation under casework conditions of such machine-learning-based systems.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Author contributions

Morrison, Ramos, Ypma: Writing - Original Draft, Writing - Review & Editing. All other authors: Writing - Review & Editing.

Acknowledgements

The writing of this response was supported by Research England’s Expanding Excellence in England Fund as part of funding for the Aston Institute for Forensic Linguistics 2019–2023.

References


https://doi.org/10.1016/j.fsisyn.2022.100230
Received 5 April 2022; Accepted 25 April 2022
Available online 6 May 2022
2589-871X/© 2022 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).


Geoffrey Stewart Morrison*
Forensic Data Science Laboratory, Aston University, Birmingham, UK
Forensic Evaluation Ltd, Birmingham, UK

Daniel Ramos
AUDIAS – Audio, Data Intelligence and Speech, Escuela Politécnica Superior, Universidada Autónoma de Madrid, Madrid, Spain

Rolf JF Ypma
Netherlands Forensic Institute, The Hague, the Netherlands
Forensic Data Science Laboratory, Aston University, Birmingham, UK

Nabanita Basu
Netherlands Forensic Institute, The Hague, the Netherlands

Kim de Bie
Netherlands Forensic Institute, The Hague, the Netherlands

Ewald Enzinger
Eduworks Corporation, Corvallis, OR, USA

Zeno Geradts
Netherlands Forensic Institute, The Hague, the Netherlands
University of Amsterdam, Amsterdam, the Netherlands

Didier Meuwly
Netherlands Forensic Institute, The Hague, the Netherlands
University of Twente, Enschede, the Netherlands

David van der Vloed
Netherlands Forensic Institute, The Hague, the Netherlands

Peter Vergeer
Netherlands Forensic Institute, The Hague, the Netherlands

Philip Weber
Forensic Data Science Laboratory, Aston University, Birmingham, UK

* Corresponding author.

E-mail address: geoff-morrison@forensic-evaluation.net (G.S. Morrison).