

Corrigendum to “Shannon Entropy and Mutual Information for Multivariate Skew-Elliptical Distributions” published in Scandinavian Journal of Statistics (2013), vol. 40, pp. 42–62

Reinaldo B. Arellano-Valle¹ | Javier E. Contreras-Reyes²  |

Marc G. Genton³ 

¹Departamento de Estadística, Pontificia Universidad Católica de Chile, Santiago, Chile

²Instituto de Estadística, Facultad de Ciencias, Universidad de Valparaíso, Valparaíso, Chile

³Statistics Program, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia

Correspondence

Marc G. Genton, Statistics Program, King Abdullah University of Science and Technology, Thuwal 23955-6900, Saudi Arabia.

Email: marc.genton@kaust.edu.sa

We thank Florian Stijven, Ariel Alonso Abad, and Gökçe Deliorman for pointing out typos in the signs of the formula for the mutual information index for the Student’s t case (p. 47, last formula of Section 2.4). The correct formula is:

$$\begin{aligned} I_{\mathbf{XY}}^{T_{n+m}}(\boldsymbol{\Omega}, \nu) &= I_{\mathbf{XY}}^{N_{n+m}}(\boldsymbol{\Omega}) + \log \left[\frac{\Gamma(\nu/2)\Gamma\{(v+n+m)/2\}}{\Gamma\{(v+n)/2\}\Gamma\{(v+m)/2\}} \right] + \frac{v+m}{2} \psi\left(\frac{v+m}{2}\right) \\ &\quad + \frac{v+n}{2} \psi\left(\frac{v+n}{2}\right) - \frac{v+n+m}{2} \psi\left(\frac{v+n+m}{2}\right) - \frac{\nu}{2} \psi\left(\frac{\nu}{2}\right). \end{aligned}$$

These typos have also been mentioned in De Keyser and Gijbels (2024), see their Example 3, albeit without providing the corrected formula.

ORCID

Javier E. Contreras-Reyes  <https://orcid.org/0000-0003-1172-5456>

Marc G. Genton  <https://orcid.org/0000-0001-6467-2998>

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De Keyser, S., & Gijbels, I. (2024). Hierarchical variable clustering via copula-based divergence measures between random vectors. *International Journal of Approximate Reasoning*, 165, 109090.