



Independent Components Analysis with the JADE algorithm (vol 67, pg 220, 2015). Corrigendum

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Corrigendum

Corrigendum to 'Independent Components Analysis with the JADE algorithm'

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The authors regret that there are some errors present in the published paper.

- In Figure 2, a bracket is misplaced in the last "equation" (on the last row), which should be:

$$\mathbf{X} \times \mathbf{S}^T \left(\begin{array}{c|c} \mathbf{S} & \\ \hline & \mathbf{S}^T \end{array} \right)^{-1} \xrightarrow{\text{Calculate Proportions}} \text{Mixing matrix } \mathbf{A}_{(r \times n)}$$

- Equation (5c) should read: $\text{Cum}_4\{\mathbf{x}, \mathbf{x}, \mathbf{x}, \mathbf{x}\} = E\{\mathbf{x}^4\} - 3E^2\{\mathbf{x}^2\}$;
- Equations of the 3 auto-cumulants (paragraph below Equation 6) should read:

$$\text{Cum}_4\{\mathbf{p}_1, \mathbf{p}_1, \mathbf{p}_1, \mathbf{p}_1\} = E\{\mathbf{p}_1^4\} - 3E^2\{\mathbf{p}_1^2\};$$

$$\text{Cum}_4\{\mathbf{p}_2, \mathbf{p}_2, \mathbf{p}_2, \mathbf{p}_2\} = E\{\mathbf{p}_2^4\} - 3E^2\{\mathbf{p}_2^2\};$$

$$\text{Cum}_4\{\mathbf{p}_3, \mathbf{p}_3, \mathbf{p}_3, \mathbf{p}_3\} = E\{\mathbf{p}_3^4\} - 3E^2\{\mathbf{p}_3^2\};$$

- In Equation 8, it should be clear that the second loop (i_2) is incremented in the first loop (i_1). Equation (8) should therefore read:

for $i = 1$ to $n(n+1)/2$

$\text{matrix} = \mathbf{M}_i;$

for $i_1 = 1$ to n

for $i_2 = 1$ to n

$$\mathbf{M}_i(i_1, i_2) = \text{sum}(\text{sum}(\text{squeeze}(\mathbf{K}(i_1, i_2, :, :)) \times \text{matrix}));$$

The authors would like to apologise for any inconvenience caused.

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