Corrigendum

Corrigendum to “A Diagnosis Method for Rotation Machinery Faults Based on Dimensionless Indexes Combined with K -Nearest Neighbor Algorithm”

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In the article titled “A Diagnosis Method for Rotation Machinery Faults Based on Dimensionless Indexes Combined with K -Nearest Neighbor Algorithm” [1], there was an error in the “Theory” section which should be corrected as follows.

(4) when $T = \infty$, $m = 4$, kurtosis index K_v is defined as

$$K_v = \lim_{T \rightarrow \infty} \frac{\left[\int_{-\infty}^{+\infty} |x|^4 \xi(x) dx \right]}{\left[\int_{-\infty}^{+\infty} x^2 \xi(x) dx \right]^2} = \frac{E(|x|^4)}{[E(|z|^2)]^2} \quad (6)$$

should be corrected to

(4) when $T = 4$, $m = 2$, kurtosis index K_v is defined as

$$K_v = \lim_{T \rightarrow \infty} \frac{\left[\int_{-\infty}^{+\infty} |x|^4 \xi(x) dx \right]^{1/4}}{\left[\int_{-\infty}^{+\infty} x^2 \xi(x) dx \right]^{1/2}} = \frac{E(|x|^4)}{[E(|z|^2)]^2}. \quad (6)$$

References

- [1] J. Xiong, Q. Zhang, Z. Peng, G. Sun, W. Xu, and Q. Wang, “A diagnosis method for rotation machinery faults based on dimensionless indexes combined with K -nearest neighbor algorithm,” *Mathematical Problems in Engineering*, vol. 2015, Article ID 563954, 9 pages, 2015.

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