

Errata

Correction to “Closed-Form Rational Approximations of Fractional, Analog and Digital Differentiators/Integrators”

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In [1], equations (17a) and (17b) should have appeared as follows.

For any integer n , the $2(n+1)$ coefficients $\bar{\alpha}_{n,i}$ and $\bar{\beta}_{n,i}$, $i = 0, 1, \dots, n$, are

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$$\bar{\alpha}_{n,i} = C(n,i)(i+1+\nu)_{(n-i)}(n-\nu)_{(i)*} \quad (17a)$$

$$\bar{\beta}_{n,i} = C(n,i)(n-i+1+\nu)_{(i)}(n-\nu)_{(n-i)*} \quad (17b)$$

where

$$(n-\nu)_{(i)*} := (n-\nu)(n-\nu-1)\dots(n-\nu-i+1)$$

and

$$(n-\nu)_{(n-i)*} := (n-\nu)(n-\nu-1)\dots(i-\nu+1)$$

are falling factorials. It holds $(n-\nu)_{(0)*} = 1$. Moreover, note that

$$\bar{\beta}_{n,i} = \bar{\alpha}_{n,n-i}.$$

REFERENCES

- [1] G. Maione, “Closed-form rational approximations of fractional, analog and digital differentiators/integrators,” *IEEE J. Emerg. Sel. Top. Circuits Syst.*, vol. 3, no. 3, pp. 322–329, Sep. 2013.