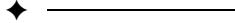# Errata

Erratum to "Adaptive Smoothing via Contextual and Local Discontinuities"

Ke Chen

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THE author of the paper "Adaptive Smoothing via Contextual and Local Discontinuities," which appeared in the *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 27, no. 10, pp. 1552-1567, Oct. 2005, would like to point out that equation (9) on page 1555 in [1] should have been read as follows:

$$
D_{xy;ij}^{+} = \sum_{\substack{(v,w)\in\mathcal{N}_{xy;ij}(x,y) \\ (v',w')\in\mathcal{N}_{xy;ij}(i,j) \\ s.t. x-v=i-v', y-w=j-w'}} \left[1 - \exp\left(-\frac{(d_{vw;v'w'}^{+})^{2}}{2\sigma_u^2} \right) \right] \exp\left(-\frac{d_{xy;vw}^{2}}{2R_{xy;ij}^{2}} \right),
$$

(9a)

$$
D_{xy;ij}^{-} = \sum_{\substack{(v,w)\in\mathcal{N}_{xy;ij}(x,y) \\ (v',w')\in\mathcal{N}_{xy;ij}(i,j) \\ s.t. x-v=i-v', y-w=j-w'}} \left[1 - \exp\left(-\frac{(d_{vw;v'w'}^{-})^{2}}{2\sigma_u^2} \right) \right] \exp\left(-\frac{d_{xy;vw}^{2}}{2R_{xy;ij}^{2}} \right),
$$

(9b)

where

$$
d_{xy;vw}^{2} = (x-v)^2 + (y-w)^2,
$$
$$
d_{vw;v'w'}^{+} = \begin{cases} I_{(v,w)} - I_{(v',w')}, & \text{if } I_{(v,w)} - I_{(v',w')} > 0, \\ 0, & \text{otherwise.} \end{cases}
$$
$$
d_{vw;v'w'}^{-} = \begin{cases} I_{(v,w)} - I_{(v',w')}, & \text{if } I_{(v,w)} - I_{(v',w')} < 0, \\ 0, & \text{otherwise.} \end{cases}
$$

The author is grateful to X. Hu for finding the typo by comparing the author's source code with the algorithm description in [1].

REFERENCES

[1]   K. Chen, "Adaptive Smoothing via Contextual and Local Discontinuities," *IEEE Trans. Pattern Analysis and Machine Intelligence,* vol. 27, no. 10, pp. 1552-1567, Oct. 2005.

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