

Errata

Erratum to “Adaptive Smoothing via Contextual and Local Discontinuities”

Ke Chen



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:

$$D_{xy;ij}^+ = \sum_{\substack{(v,w) \in \mathcal{N}_{xy;ij}(x,y) \\ (v',w') \in \mathcal{N}_{xy;ij}(i,j) \\ s.t. x-v=i-d', y-w=j-w'}} \left[1 - \exp \left(-\frac{(d_{vw;v'w'}^+)^2}{2\sigma_u^2} \right) \right] \exp \left(-\frac{d_{xy;vw}^2}{2R_{xy;ij}^2} \right), \quad (9a)$$

$$D_{xy;ij}^- = \sum_{\substack{(v,w) \in \mathcal{N}_{xy;ij}(x,y) \\ (v',w') \in \mathcal{N}_{xy;ij}(i,j) \\ s.t. x-v=i-d', y-w=j-w'}} \left[1 - \exp \left(-\frac{(d_{vw;v'w'}^-)^2}{2\sigma_u^2} \right) \right] \exp \left(-\frac{d_{xy;vw}^2}{2R_{xy;ij}^2} \right), \quad (9b)$$

where

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

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.

• The author is with the School of Computer Science, The University of Manchester, Manchester M13 9PL, UK.
E-mail: chen@cs.manchester.ac.uk.

Manuscript received 18 Mar. 2008; accepted 15 July 2008.

Recommended for acceptance by Z. Ghahramani.

For information on obtaining reprints of this article, please send e-mail to: tpami@computer.org, and reference IEEECS Log Number TPAMI-2008-03-0155.

Digital Object Identifier no. 10.1109/TPAMI.2008.186.