

Errata for ‘A novel truncated norm regularized method for multichannel color image
denoising’

Yiwen Shan

April 15, 2024

1. On page 1 (Abstract), the second last word at the line 8 should be “applies”.
2. On page 3, the 6th word at the line 7 in the last paragraph of the Introduction should be “applies”.
3. On page 5, the contours in Fig. 2 are incorrect since $\sigma_{t+1}(\mathbf{X}) \geq \sigma_{t+2}(\mathbf{X})$.
4. On page 5, the equation (19) should be

$$\sigma_c = \sqrt{\left| \sigma_{c-0}^2 - \frac{1}{d^2} \|\mathbf{y}_1^{(c)} - \mathbf{x}_1^{(c)}\|_2^2 \right|},$$

where $\mathbf{y}_1^{(c)}, \mathbf{x}_1^{(c)} \in \mathbb{R}^{d^2}$.

5. On page 6, there is an error in equation (35). The lower bound of i should be 1 instead of 0, i.e.,

$$\varrho_i^* = \begin{cases} \sigma_i(\mathbf{B}), & \text{if } 1 \leq i < t+1, \\ \left(1 + \frac{\alpha\tau}{\|\mathcal{S}_\tau(\mathbf{r})\|_2}\right) \cdot \mathcal{S}_\tau(\sigma_i(\mathbf{B})), & \text{if } t+1 \leq i \leq n. \end{cases}$$

The same error also occurs in equation (44).

6. On page 7, the equation (37) should be

$$\langle \mathbf{Z}, \mathbf{B} \rangle \leq \sum_{i=1}^n \sigma_i(\mathbf{B}) \cdot \sigma_i(\mathbf{Z}).$$

7. On page 7, the sentence between equation (40) and equation (41) should be “When $1 \leq i < n+1, \dots$ ”.
8. On page 14, the publication title of reference [1] should be “IEEE Trans. Pattern Anal. Mach. Intell.”.
9. On page 15, the publication title of reference [53] should be “IEEE Trans. Pattern Anal. Mach. Intell.”.