

# Errata for book *Natural Image Statistics*

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*Page numbers refer to preprint/published version.*

1. p. 48/48, Exercise 3: The first sentence should be “Prove (2.16) and (2.17).”
2. p. 60/59, caption of Figure 3.8. “distance from zero” should be “distance from zero frequency”
3. p. 125/119, Section 5.8.2. It should be mentioned that this theory is only true in the limit of infinitely large images, or if they are cyclic. Otherwise, border effects will make the theory only approximately correct.
4. p. 225/215, Equation (10.5). The variable  $s_i$  should be denoted by some other symbol because it is not the same  $s_i$  as in other equations.
5. p. 248/237, last paragraph of Exercise 2 c: “Express  $\varphi$ ” should be “Express  $\varphi_x$ ”.
6. p. 284/273, caption of Figure 12.10. The following explanation should be added: “Horizontal axis: coordinate in image space (1D slice). Vertical axis: grey-scale value of synthesized image.”
7. p. 163/172, Eq. (7.19), “log” is missing in front of the latter term, which should be  $\log \frac{4\sqrt{3}}{\pi}$ .
8. p. 317/305, soon after Equation (14.11). “gradient descent” should be “gradient ascent”.
9. p. 399/383, Equation (18.11). The transposes in the last term are wrong, they should be  $\mathbf{W}\nabla f(\mathbf{W})^T\mathbf{W}$ .