

## Gabor filters and phase portraits for the detection of architectural distortion in mammograms

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Due to a processing error the presentation of the sixth sequence of Sect. 2.1 and Eqs. 8 and 10 was incorrect. The correct versions are given below.

Let  $\theta(x,y)$  be the texture orientation at  $(x,y)$ , and  $g_k(x,y)$ ,  $k = 0, 1, \dots, 179$ , be the Gabor filter oriented at  $\alpha_k = -\pi/2 + \pi k/180$ . Let  $I_{\text{HPF}}(x,y)$  be the high-pass-filtered version of the mammogram being processed, and  $I_k(x,y) = (I_{\text{HPF}} * g_k)(x,y)$  represent the Gabor-filtered images, where the asterisk denotes linear convolution. Then, the orientation field angle of  $I(x,y)$  is given by

$$\theta(x,y) = \alpha_{k_{\max}} \quad \text{where } k_{\max} = \arg \left\{ \max_k [|I_k(x,y)|] \right\}. \quad (2)$$

$$\theta_f(x,y) = \frac{1}{2} \arctan \left( \frac{(h * s)(x,y)}{(h * c)(x,y)} \right), \quad (8)$$

$$M_f(x,y) = (h * M_{\text{CLS}})(x,y), \quad (10)$$

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