Notes and errata of the paper:

Grayscale Template-Matching Invariant to Rotation, Scale, Translation, Brightness and Contrast

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Question 1: Can Cifi and Rafi be exchanged? That is, is it possible to do Rafi first, and then do Cifi?
Question 2: I implemented Ciratefi as described in your paper. Why my implementation does not find small templates, while the implementation I downloaded from your homepage does?
Answer to both questions: There is a detail about Cifi that we forgot to explain in the paper. I will explain it through an example. Let us suppose that Cifi has computed 5 circular projections for each pixel of the image to analyze *A*. Let $Q_{1.2}$, $Q_{1.0}$ and $Q_{0.8}$ be the query template Q scaled by factors 1.2, 1.0, and 0.8 (note that $Q = Q_{1.0}$). Let us suppose that 6 circles fit inside $Q_{1.2}$, 5 circles fit inside $Q_{1.0}$ and 4 inside $Q_{0.8}$. Then, Cifi uses all 5 circles of $Q_{1.0}$ to find $Q_{1.0}$ in *A*. It ignores the outermost circle of $Q_{1.2}$, using only the 5 inner circles to find it. And it uses only 4 circles of $Q_{0.8}$ (it ignores the outermost circle or, equivalently, inserts a dummy "don't care" outermost circle) to find $Q_{0.8}$.
Answer to Question 1: No, Cifi cannot be exchanged with Rafi. Using Rafi first, it is impossible to insert a dummy "don't care" circle. Moreover, it is not possible to run Rafi without the "probable scale factor" computed by Cifi.
Answer to Question 2: You must implement Cifi's "normalized cross correlation" taking into account the property explained above.

Errata:

The correct equation (5) is:

$$\mathrm{Cis}_B(x, y, r) = \frac{1}{2\pi r}\int_0^{2\pi} B(x + r\cos\theta, y + r\sin\theta)\,\mathrm{d}\theta \qquad (5)$$

The correct equation (10) is:

$$\mathrm{Ras}_B^{\lambda}(x, y, \alpha) = \frac{1}{\lambda}\int_0^{\lambda} B(x + t\cos\alpha, y + t\sin\alpha)\,dt \qquad (10)$$