

## **STATISTICAL TEXTURE PRIMITIVE EXTRACTION USING DIFFERENT WAVELET TRANSFORMS**

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### **Abstract**

The present paper estimates the success rates of Original, Haar, Daubechies-6, Coiflet-6 and Symlet-8 wavelet transforms based on statistical texture primitives. Statistical texture primitives are evaluated by using first order statistics. Statistical approach is one of the best ways to describe texture primitives. First order statistics are very straight forward. They are calculated from the probability of observing a particular pixel value at a randomly chosen location in the image. The present paper estimated the first order statistics on entire image to estimate the overall behavior of texture with respect to their primitives. In this paper, texture description based on first order statistical features obtained from various one level wavelet transforms are proposed. Since the most significant information of a texture often appears in the approximation coefficients part, this part is used for the computation of first order statistical parameters. Further texture descriptive rates of these wavelets, based on their success rates, were evaluated with the comparison of original textures. The experimental results on 24 Brodatz textures have given good results and concise conclusions are drawn.

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**Key Words** : Pixel values, statistical approach, Haar- Daubachies- Coeflet- Symlet wavelets, success rate..