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Athens, GA 30602. *A Bivariate Spline Method for Image Analysis.*

We first describe how to use bivariate box splines to construct a wavelet frame which can decompose images sharply. Comparison with other edge detection methods shows that our method is much more effectively. A few possible application of this method for object identification, letter reading, and satellite image analysis will be outlined. Finally, this method can help find a better triangulation of the image which is essential to be able to approximate image accurately. (Received September 17, 2014)