ABSTRACT

TITLE:	Comparing Wavelet Techniques for Content-Based Image Retrieval
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ABSTRACT: The volume of images in any given digital database is rapidly increasing as technology becomes cheaper, more accessible, and more relied upon. With a large amount of images to sift through, the value of meaningful and efficient image searches increases greatly. Wavelets are a useful tool for image processing, and specifically for the purpose of image query systems. An image query system attempts to take a given image and return similar images from the data base. This talk considers three approaches of creating an image query system. By using a discrete wavelet transform the texture as well as spatial features of an image can be analyzed. This allows us to find significant features of a specified image which then can be compared to those of the images within the database. From this technique we are able to search a given database of images to produce a set of images that are similar to a queried image. A comparison of the presented methods illustrate the value of wavelets for content-based image retrieval.