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## FROM IMAGE CONTOURS TO PIXELS

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Keywords: Image processing, Image compression, Image contours, Image reconstruction

**Abstract.** This paper relates to the reconstruction of digital images using their contour representations. The process involves determining the pixel intensity value which would exist at the intersections of a regular grid using the nodes of randomly spaced contour locations. The reconstruction of digital images from their contour maps may also be used as a tool for image compression. This reconstruction process may provide for more accurate results and improved visual details than existing compressed versions of the same image, while requiring similar memory space for storage and speed of transmission over digital links.

For the class of images investigated in this work, the contour approach to image reconstruction and compression requires contour data to be filtered and eliminated from the reconstruction process. Statistical tests which validate the proposed process conclude this paper.

[Conference Paper](#) (PDF, 1209 KB)

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