# Robust Super-Resolution Mosaicing of Compressed Images

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**Abstract**

Image mosaicing is the process of increasing the visual field of view of a camera by combining several partial views of a scene into a single broad view. The term super-resolution imaging is often used to describe the fusion of multiple low-resolution images to produce a single high-resolution image. The combination of image mosaicing and super-resolution imaging, i.e. super-resolution mosaicing, is a powerful means of representing all the information of multiple overlapping images to obtain a high resolution broad view of a scene. In most current image acquisition systems, images are routinely compressed prior to transmission and storage. In this talk, we present a robust super-resolution mosaicing algorithm which can be applied to compressed images. The algorithm operates on the quantized transform coefficients available in the compressed bitstream so that super-resolution reconstruction can be implemented directly in the transform domain.