



# Image resolution enhancement by using interpolation followed by iterative back projection

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Mots-clés	Image Registration [4], Iterative Back Projection [5], Super resolution [6]  In this paper, we propose a new super resolution technique based on the interpolation followed by registering them using iterative back projection (IBP). Low resolution images are being interpolated and then the interpolated images are being registered in order to generate a sharper high resolution image. The proposed technique has been tested on Lena, Elaine, Pepper, and Baboon. The quantitative peak signal-to-noise ratio (PSNR) and structural similarity index (SSIM) results as well as the visual results show the superiority of the proposed technique over the conventional and state-of-art image super resolution techniques. For Lena's image, the PSNR is 6.52 dB higher than the bicubic interpolation.
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