



## Block based image compression technique using rank reduction and wavelet difference reduction

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Auteur	Rasti, Pejman [1], Traumann, Andres [2], Bolotnikova, Anastasia [3], Lüsi, Iris [4], Daneshmand, Morteza [5], Noroozi, Fatemeh [6], Samuel, Kadri [7], Sarkar, Suman [8]
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Résumé en anglais	In this paper a new block based lossy image compression technique which is using rank reduction of the image and wavelet difference reduction (WDR) technique, is proposed. Rank reduction is obtained by applying singular value decomposition (SVD). The input image is divided into blocks of equal sizes after which quantization by SVD is carried out on each block followed by WDR technique. Reconstruction is carried out by decompressing each blocks bit streams and then merging all of them to obtain the decompressed image. The visual and quantitative experimental results of the proposed image compression technique are shown and also compared with those of the WDR technique and JPEG2000. From the results of the comparison, the proposed image compression technique outperforms the WDR and JPEG2000 techniques.
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