

# Abstract

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## **Compressing Sets of Similar Medical Images Using Multilevel Centroid Technique**

application areas such as medical imaging satellite imaging often store large collections of similar images. lossless compression techniques are usually needed in such critical applications. previous researches have introduced the centroid method, which gets benefit from the inter-image redundancy  $\hat{}$  the set redundancy. in this paper a new algorithm is proposed as an extension of the centroid method. experimental results with two sets of ct/mri brain images demonstrate the efficiency superiority of the proposed algorithm in respect to compression ratio. 1