

Abstract Submitted
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Study of the Medical Imaging of a Human Brain JINHO KANG, SOO HWAN PARK, HA YOUNG KYUNG, CRG(Choice Research Group) — In order to produce image domain from MRI, a complex computational process that requires an intensive analysis is involved. Often, the process of transformation from frequency domain to image domain requires time because Inverse Fourier Transformation takes every frequency points to determine the final output image. However, if a proper function is multiplied to K-space, it results in reduced domains of frequency, which will be used to determine output images. The purpose of the present research is to develop a more efficient low pass filter or filter function in order to increase the resolution of a brain MRI image, and at the same time, decrease the time required to produce the image. In this paper, K-space was constructed from the MRI image of the human brain using the MATLAB software. Different proposed filters were applied on the full K-space in order to find the most efficient filter that can be used to produce best MRI image.

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