

## Multi-Spectral Medical Images Enhancement Using a Weber's law

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**Abstract :** The aim of this research is to present a multi spectral image enhancement methods used to achieve highly real digital image populates only a small portion of the available range of digital values. Also, a quantitative measure of image enhancement is presented. This measure is related with concepts of the Webers Low of the human visual system. For decades, several image enhancement techniques have been proposed. Although most techniques require profuse amount of advance and critical steps, the result for the perceive image are not as satisfied. This study involves changing the original values so that more of the available range is used; then increases the contrast between features and their backgrounds. It consists of reading the binary image on the basis of pixels taking them byte-wise and displaying it, calculating the statistics of an image, automatically enhancing the color of the image based on statistics calculation using algorithms and working with RGB color bands. Finally, the enhanced image is displayed along with image histogram. A number of experimental results illustrated the performance of these algorithms. Particularly the quantitative measure has helped to select optimal processing parameters: the best parameters and transform.

**Keywords :** image enhancement, multi-spectral, RGB, histogram

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